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THE

BOTANICAL REGISTER:

CONSISTING OF

Coloured Figures

OF

EXOTIC PLANTS,

CULTIVATED IN

BRITISH GARDENS;

WITH THEIR

HISTORY AND MODE OF TREATMENT.

THE DESIGNS BY

Sydenham Edwards,

FELLOW OF THE LINNEAN SOCIETY.

VOL. IV.

——viret semper——nec fronde caducâ
Carpitur.

LONDON:

PRINTED FOR JAMES RIDGWAY, PICCADILLY.

1818.

Printed by S. Gosnell, Little Queen Street, London.

APPENDIX TO THE CATALOGUES OF BOOKS

IN THE FIRST, SECOND, AND THIRD VOLUMES;

OR,

List of Books quoted in the Fourth Volume in addition to those quoted in the First, Second, and Third.

ACT. stockholm. vide *act. holm.* in catalogo librorum volumine primo citatorum.

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JASMINUM auriculatum.

Eared-leaved Jasmine.

DIANDRIA *MONOGYNIA.*

Nat. ord. JASMINEÆ, *Jussieu gen.* 104. *Div. II.* Fructus baccatus.
JASMINEÆ. *Brown prod.* 350.
JASMINUM. Suprà vol. 1. *fol.* 1.

Div. Foliis compositis.

J. *auriculatum*, foliis ternatis; ramulorum floriferorum simplicibus, calycibus angulatis ramisque teretibus pubescentibus. *Vahl symb.* 3. 1.
Jasminum auriculatum. *Willd. sp. pl.* 1. 38. *Vahl enum.* 1. 30. *Hort. Kew. ed.* 2. 1. 17.
Mogorium trifoliatum. *Lamarck encyc.* 4. 114. *illustr.* 1. 24.
Yuthica. *Asiat. research.* 4. 246.

Frutex *cano-pubescens:* caulis *lignosus, flexuoso-erectus, pallido-fuscus, cortice rimoso:* rami *teretes, oppositi,* non floriferi *volubiles flexiles cum foliis ternatis,* floriferi *non volubiles strictiusculi cum foliis simplicibus.* Folia *disticho-opposita, patentissima, villositatem densam viridi-pellucentia, subtùs ferè lanata;* foliola *ovata, costato-nervosa, suprà acuminata cum mucrone, terminale multotiès majus lateralibus 2 exiguis: majora sesquiunciam longa, interdùm elliptica v. subrotunda:* petioli *hirsuti,* communes 4-*plo breviores foliolo terminali,* partiales *brevissimi.* Paniculæ *breves, terminales, in hortis nostratibus sæpiùs ex floribus nonnullis abortientes:* pedunculi *decussato-trichotomi* pedicellique *teretes tomentosi.* Bracteæ *parvulæ, patulæ.* Flores *in singulâ trichotomiâ subsessili-congesti, è minimis generis, candidi, odoris jucunditate congeneribus præstantes.* Cal. *angustus, turbinato-cylindraceus, crassus, tomentosus, suturis quinque tenuissimis membranosis verticalibus dentibus totidem alternantibus obtusulis utrinque pubescentibus notatus.* Corollæ limbus 5-7-*partitus, brevior tubo,* laciniis *stellato-distantibus, lineari-oblongis, obtusis cum brevi acuminulo, margine revolutis,* ¼ *partem unciæ longis:* tubus *cum fauce simul* 4-*plo longior calyce,* ⅓ *partem unciæ subæquans, striatulus, punctis ubi inseruntur filamenta extùs utrinque protuberans;* faux *coarctato-turbinata compressa vix brevior tubo.* Fil. *brevia, filiformia, basi abruptè introrsùm flexa axique faucis convenientia:* anth. *lineares, luteæ,* 3-*plo longiores filamento, mucronatæ, fauce reconditæ.* Stylus *æquans faucem, virens:* stigma *viride, clavato-crassum, compressum acumine subulato, hìnc flexum, utrinque saturatum quasi ex* 2 *conferruminatis.* Germ. *glabrum.* Bacca *globosa, ut in* J. Sambac.

Perhaps the least ornamental species of the genus. The flowers are small and not numerous, and the white appears less clear than in others of the same colour, owing to a cinereous hue imparted to the foliage by the short dense fur that clouds its green; but the fragrance they diffuse seems to us the most grateful of any of the species. Native of the East Indies, where however it is said not to be a

common plant. Introduced by Sir Joseph Banks in 1790. No drawing of it has been published before the present, which was taken in the summer at the nursery of Messrs. Whitley and Co. Fulham; where it is treated as a tender greenhouse plant.

A grey furred shrub, in the plant we saw, of straggling growth: *stem* upright, flexuose, bark cracked, pale brown: *branches* opposite, round, when not flowerbearers twining and flexile with a ternated foliage, when flowerbearers straight and rather stiff with a simple foliage. *Leaves* distichly opposite or facing by pairs in two ranks only, widespread; *leaflets* ovate, nerved, the end one many times larger than the two diminutive side ones, largest (seen by us) about an inch and an half long, acuminated at the top and mucronate, in some instances broadly elliptic and nearly round: *petioles* shaggily furred, general ones about 4 times shorter than the terminal leaflet, partial ones extremely short. *Panicles* short, terminal, trichotomous, in the gardens of this climate partially abortive: *peduncles* and *pedicles* round tomentose or short-woolled. *Bractes* small, somewhat open. *Flowers* in each trichotomy crowded and subsessile, of the smallest size in the genus, white. *Calyx* narrow, turbinately cylindrical, furred, thick, marked lengthways by five equidistant extremely narrow membranous seams, five-toothed, teeth bluntish, pubescent inside and outside. *Limb* of the *corolla* 5-7-parted, stellate, shorter than the tube, *segments* standing apart, linearly oblong, bluntish with a short point, edges of the sides revolute, about a quarter of an inch in length; *tube* together with the faux 4 times longer than the calyx, about a third of an inch long, streakletted, with a small external embossment on both sides at the point of insertion of each filament: *faux* almost as long as the tube, narrowly turbinate, compressed. *Filaments* short, bent abruptly inwards at the base, and projecting from the wall of the faux, so as to meet together at its axis: *anthers* yellow, linear, three times longer than the filaments, mucronate, below the orifice of the faux. *Style* even with the faux, green: *stigma* clavately enlarged, compressed, subulately pointed, seamed down the sides. *Germen* smooth. *Berry* globular, like that of the Arabian Jasmine.

PANCRATIUM guianense.

Cayenne Sea-Daffodil.

HEXANDRIA *MONOGYNIA.*

Nat. ord. NARCISSI. *Jussieu gen.* 54. *Div. II.* Germ. inferum.
AMARYLLIDEÆ. *Brown prod.* 296. *Sect. I.*
PANCRATIUM. Suprà vol. 1. *fol.* 43.

Div. Flores sessiles v. subsessiles: limbo radiato: dentibus senis coronæ staminiferis.

P. *guianense*, sessili-multiflorum; foliis longè petiolatis ovali-oblongis, abruptè acuminatis; spatha valvis 4 decussato-oppositis erectis; tubo plurimùm longiore limbo, coronâ angustâ 4-plo breviore laciniis linearibus, repando-sinuata sinubus integerrimis.

Pancratium. *Exemplar in Herb. Banks. bulbo Guianâ allato et paucis abhìnc annis Horto Kewensi floridos decerptum.*

Fol. *saturatè viridia, petiolata;* lamina *elongato-ovalis utrinque attenuata, cuspidata, costâ paulò prominente, suboctouncialis v. ultrà latitudine triunciali, in sicco visa clathrato-venosa:* petiolus *angustus, 3-4-uncialis, subtriquetro-canaliculatus, carinâ obtusâ.* Scapus *anceps.* Spatha 4-*valvis, valvis herbaceo-albicantibus, oblongis, longissimum subtriuncialibus:* umbella *sessilis, sub8-flora;* floribus *candidis, septenis centralem arctè ambientibus, in extensum* 11-*unciales;* tubus *chloroleucus, semipedalis v. ultrà, rectiusculus, teres, obsoletè angulosus, estriatus, crassitudine ferè duplâ pennæ corvinæ, suprà angustior atque manifestius trigonus;* limbus *stellatus, patentissimus, laciniis linearibus 4-5 uncialibus latitudine 2-3-lineari, longè acuminatis, acutis, infernè versùs arctatis et canaliculatis, interioribus sublatioribus, nunc imo margine crispulis.* Corona *angusta, diametro vix majore tubi, sexcostata, 4-plo brevior limbo indèque omninò libera, sinubus interstamineis integerrimis, curvo leni excisis.* Fil. *virentia, gracillima, setaceo-filiformia, ½ parte v. circà breviora limbo:* anth. *vitellino-flavicantes. lineares, angustissimæ, obliquo-incumbentes, sigmoideo-flexæ.* Stylus *viridis, æqualis corollæ, 3-plo crassior filamentis;* stig. *capitellatum.* Germ. *breve, ellipticum, 3-gonum:* ovula 8-10 *in singulo loculo, oblonga, ascendentia, imo angulo loculi biseriatìm affixa.*

A species, which while only known to us through the specimen in the Banksian Herbarium, we had set down in a review of this genus, in the Journal of Science and the Arts, for the same as the *undulatum* of Messrs. Humboldt and Bonpland, a species known to us solely by description from the dried subject. But the comparison of our plant in a fresh state with this description, has induced us to separate the two, though manifestly very near akin. The crown in *undulatum* is described with a tooth in each interstamineous

sinus, here each sinus is quite entire and even; the limb is there so far undulated or curled as to have suggested the specific name, but is clearly not so here; the leaves are there of the dimensions of 6 inches in length and 4 in breadth, affording very different proportions to those found in the leaves of the present plant, where they are about 8 inches in length, and scarcely 3 in breadth. Both however have this peculiarity in common, viz. that the dried foliage bears a great resemblance to that of HEMEROCALLIS *japonica*, not merely in point of contour, but also in the appearance of the nerves, which are barred or latticed: a character hardly to be perceived in the fresh state in this species, nor probably in the other.

The plant now represented is the produce of seed received by Mr. Lambert from Demerara; was reared in his hothouse at Boyton, and blossomed in November. The specimen in the Banksian Herbarium (unquestionably of the same species) had been obtained from a bulb that flowered several years ago at Kew; and which came out of a vessel captured in the late war, having on board a collection of plants of Cayenne for the Botanic Garden at Paris.

Leaves deep green, petioled; *blade* elongatedly oval, tapered at each end, abruptly pointed; *petiole* 3-4 inches long, channelled, narrow. *Scape* ancipital or two-edged. *Spathe* 4-valved, valves green inclining to white, oblong, the longest about 3 inches high, decussatedly opposite, upright: *umbel* sessile, about 8-flowered; flowers white, 7 surrounding a central one, when extended about 11 inches long; *tube* greenish white, half a foot high or more, round, straightish, faintly angular, streakless, about twice the thickness of a crow-quill, narrowed above and more conspicuously triangular: *limb* radiated, widespread, segments linear, about 2 or 3 lines broad, from 4 to 5 inches long, tapered to a point from far below, at the lower part narrowed and channelled, inner ones broadest, sometimes slightly curled at the lower edges. *Crown* narrow, scarcely wider than the tube, 4 times shorter than the segments of the limb, from which it is entirely detached. *Filaments* extremely slender. *Anthers* orange-yellow, very slender. *Stigma* a small head. *Germen* short, elliptical, triangular: *ovula* 8-10 in each cell, oblong, pointing upwards, attached to the lower angle of the cells in two ranks.

OTHONNA cheirifolia.

Stock-leaved Barbary Ragwort.

SYNGENESIA *POLYGAMIA SUPERFLUA.*

Nat. ord. CORYMBIFERÆ. *Jussieu gen.* 177. *Div. II.* Receptaculum nudum. Sem. papposum. Flores radiati.
OTHONNA. Suprà vol. 2. fol. 108.

* *Div. Foliis divisis dentatis integerrimisve.*

O. *cheirifolia*, foliis lanceolatis trinerviis integerrimis, caule suffruticoso repente. *Linn. sp. pl.* 2. 1310.

Othonna cheirifolia. *Gouan hort.* 464. *Duham. arb.* 2. 94. *t.* 17. *Hort. Kew.* 3. 277. *ed.* 2. 5. 176. *Willd. sp. pl.* 3. 2376. *Desfont. atl.* 2. 306.

Othonna foliis cuneiformibus integerrimis sessilibus, caule fruticoso procumbente, pedunculis longissimis. *Mill. dict. ed.* 7. *n.* 6.

Othonna foliis cuneiformibus integerrimis sessilibus. *Mill. ic.* 2. 163. *tab.* 2. 45. *fig.* 1.

Suffrutex sempervirens glaucus, subbipedalis, caules *cheiranthoidi-lignescentes, radicantes, cæspitoso-procumbentes, pallidè fuscescentes*, ramis *herbaceis, crassis, assurgentibus, axillis foliorum proliferis.* Fol. *alterna, disticha, semiamplexicaulia, intervallis brevibus distincta, erecta, carnosula, trinervia, spathulata v. cuneata, elongato-oblonga, 3-uncialia v. ultrà, ad maximum latitudine ¾ partium unciæ, fine rotundata cum parvo acumine, margine in aciem cartilagineam tenuem albidam attenuata:* floralia *summa lineari-oblonga, quorum unum v. et alterum nunc brevissimum atque subovatum.* Pedunculi *uniflori, terminales, solitarii, longiores foliis, erecti, crassiusculi, teretes, glauci, propè calycem incrassati.* Cal. *campanulatus, sub-8-fidus, glaber, glaucus, subsemuncialis*, segmentis *acuminatis apice, villoso-ciliatis, membranoso-marginatis.* Cor. *aurea, diametro unciam excedente, radiata;* flosc. radii *fœminei, fertiles,* (12-13?) ⅓ *longiores calyce*, laminâ *latiùs ligulatâ, obovato-oblongâ*, 5-*nervi, lateribus involutis, dorso biplicatâ*, 3-*denticulatâ, glabrâ*, tubo *gracili glabro filiformi pallidè virente;* stig. *flavo bifido, longiùs exserto, lobis lineari-oblongis, patulis, lateribus in longum reflexis;* germ. *albo, duplo breviore pappo, teretiturbinato, glabro;* pappo *albo plumoso numeroso, æquante tubum:* flosc. radii *hermaphroditi steriles, elongato-infundibuliformes, glabri lutei, limbo erecto acuminato cum fauce simul æquante tubum filiformem:* anth^{æ} *flavis parùm exsertis, acutis:* stig. *clavato, subexserto, erecto, viridiusculo, pubescente:* germ^{e} *filiformi, longitudine tubi neque crassiore;* pappo *pauco, raro.* Recept. *nudum, conicum.*

Of the thirty-five species which have been recorded of this genus, the present is the only one that is not indigenous of the Cape of Good Hope; though by an oversight it is stated to be so in the last edition of the Hortus Kewensis. It was found by Dr. Shaw near Tunis, and cultivated by Miller at Chelsea, in 1752. Professor Desfontaines has recently observed it in the same place where it was seen by

Dr. Shaw. At the nursery of Messrs. Whitley and Co. it is treated as a hardy plant, and grows in great luxuriance, forming a close grey-leaved bush of considerable circumference, and about a foot and half high; but flowers too late in the year for the bloom to be seen in perfection any where but in the greenhouse. The specific name has been derived from the likeness of the foliage to that of the common Stock or Gilliflower; though the resemblance appears to us much stronger between the stem and branches of the two plants than between their foliage.

The principal distinction of OTHONNA, besides the barren disk and fertile ray, is a simple definitely cleft calyx.

Cheirifolia is an evergreen glaucous thickish leaved undershrub; *stems* like those of the common Stock, procumbent, rooting; *branches* assurgent, herbaceous, glaucous, fleshy, proliferous or shootbearing in the axil of every leaf. *Leaves* alternate, distich, halfstemclasping, with short intervals, rather fleshy, spathulate or cuneate, elongatedly oblong, about 3 inches in length and ¾ of an inch at the broadest, round-topped, with a small obsolete point, surrounded by a narrow white cartilaginous roughish edge: *floral ones* oblong, 1 or 2 sometimes very short and ovate. *Peduncles* one-flowered, terminal, solitary, upright, round, thickish, longer than the leaves, smooth. *Flowers* golden yellow, more than an inch in diameter, rayed. *Calyx* green, of one piece, campanulate, about half an inch deep, 7-8-cleft, smooth, glaucous, segments acuminated, villous at the point, with a white membranous edge. *Florets of the ray* fertile, 12-13? one third longer than the calyx, *blade* broadly ligulate, obovately oblong, 5-nerved, turned in at the sides, twoplaited at the back, 3-toothletted, *tube* slender, filiform, smooth, greenish; *stigma* twocleft, deep yellow, frosted, lobes short, linear, oblong, reflex along the sides, protruding; *germen* white, turbinate, round, twice shorter than the pappus, smooth: *pappus* white, numerous, feathered, dense, equal to the tube: *florets of the disk* barren, long-funnelform, smooth, yellow, *limb* pointed upright together with the faux equal to the tube: *anthers* deep yellow, protruding but little: *stigma* clavate, pubescent, greenish, protruding: *germen* slender or filiform, equal to tube: *pappus* thin, few-rayed. *Receptacle* naked, conical.

LIATRIS elegans.

Hairy-cupped Liatris.

SYNGENESIA *POLYGAMIA ÆQUALIS.*

Nat. ord. CORYMBIFERÆ. *Jussieu gen.* 177. *Div. I.* Recept. nudum. Sem. papposum. Flores flosculosi.

LIATRIS. Recept. nudum. *Cal.* oblongus, imbricatus. *Pappus* plumosus. *Hort. Kew. ed.* 2. 4. 503.

Div. Spicatæ seu racemosæ; bulbosæ.

L. ***elegans,*** caule simplici villoso, foliis linearibus subfalcatis scabro-punctatis, spica subfoliosa, pedicellis brevibus, calycinis squamis intimis ligulatis coloratis. *Pursh amer. sept.* 2. 509.

Liatris elegans. *Willd. sp. pl.* 3. 1635. *Michaux bor. amer.* 2. 91. *Hort. Kew. ed.* 2. 4. 504.

Eupatorium speciosum. *Ventenat cels.* 79.

Stæhelina elegans. *Walt. carol.* 202.

Serratula speciosa. *Hort. Kew.* 3. 138.

Herba *perennis, radice bulbosâ.* Caulis *simplex, teres, striatus, erectus, pilosus, foliosus.* Fol. *sessilia, crebra, undìque laxiùs sparsa, decrescentia, patentia, subfalcato-linearia, sesquilineam circitèr lata, utroque fine aliquantulùm attenuata nervo medio simplicissimo utrinque canaliculato-depresso percursa, glandulis immersis densiùs utrinque punctata, acumine brevissimo, subglabra pilis paucis vagis, longiora triuncialia.* Spica *cylindraceo-elongata, erecta, sparsa, simplex, numerosa, plùs minùs conferta, subfoliosa, de supernè infernè versùs florens.* Flores *subsessiles pedicello brevissimo crasso piloso, unciales, solitarii, singuli foliolo lineari-attenuato mucronato extùs pilosiusculo longiore calyce axillares.* Cal. *oblongus, angustus, squarrosus, viridi-roseus, pilosus;* foliola *lineari-lanceolata, subaristato-cuspidata, angusta,* exteriora *plurima, breviora, omninò herbacea,* interiora (6?) *ungue viridi oblongo extùs pubescente æquante flosculos, laminâ membranosâ, subscariosâ, lanceolatâ, roseâ, cuspidatâ, patulâ, utrinque glabrâ, æquante stigmata.* Flosculi 5, *tubulosi v. discoidei, infundibuliformes, extùs pruinâ albâ micantes, transversè rugulosi, elastici,* fauce *inflatiusculâ,* limbi laciniis *patentibus, oblongo-lanceolatis, dilutè carneis, intùs glabris, concavis, 3-plo ferè brevioribus fauce cum tubo simul.* Anth. *atropurpureæ,* polline *albo.* Stylus *non elasticus:* stig. 2, *longa, rosea, clavato-linearia, patentia, extùs convexa, intùs canaliculata et roscidum humorem secernentia, dorso glaberrima nec pube pro auferendo polline antherarum munita.* Germ. *oblongum, angustum, villosum:* pappus *plurimus, albus, plumosus.*

A species distinguishable amongst its congeners by a coloured ray formed by the interior leaflets of the calyx, by which the flower resembles that of an ELICHRYSUM and XERANTHEMUM. Indigenous of Carolina and Virginia, where it grows in sandy places, and flowers from September to November. It is a very ornamental plant, but has as yet

been generally found to dwindle away with us in a very short time, and is far from common in our gardens; in some of which it is sheltered in a garden-pit during winter, while in others it is treated as a hardy plant, and grown in the open border. We are obliged to Mr. Lambert for the specimen which has afforded the present drawing; it came from his seat at Boyton in November last.

Root perennial, bulbous: *stem* simple, round, fluted, upright, furred, leafy. *Leaves* sessile, numerous, scattered loosely in all directions, decreasing as they ascend upon the stem, spreading, linear and slightly falcated, about a line and a half broad, rather tapered at each end, midrib simple sunk below the surface on both sides, as are the minute glands with which they are thickly pitted, very shortly pointed, almost smooth or with a few straggling hairs, longer ones three inches in length or more. *Spike* cylindrically elongated, upright, scattered, simple, numerous, more or less close, somewhat leafy, flowering from the top downwards. *Flowers* an inch long, subsessile with an extremely short thick furred peduncle, solitary, each from the axil of a smallish linearly tapered mucronated externally furred leaf, which is longer than the calyx. *Calyx* oblong, narrow, squarrose, furred, green and rose-coloured; *leaflets* linearly lanceolate, long pointed and somewhat awned, narrow, *outer ones* many, shorter than the others, entirely green, *inner ones* (6?) with a green oblong externally furred unguis equal to the florets, and a rose-coloured membranous subscariose lanceolate long pointed spreading blade, even with the stigmas and smooth on both sides. *Florets* 5, tubulous, funnelform, glitteringly and whitely frosted on the outside, transversely wrinkled, elastic; *faux* rather inflated; *segments* of the limb spreading, oblongly lanceolate, sometimes faintly tinged with pink, smooth on the inside, concave, about three times as short as the faux and tube taken together. *Anthers* blackish purple; *pollen* white. *Style* not elastic; *stigmas* 2, long, rose-coloured, clavately linear patent, externally convex, channelled within and covered with a dewy moisture, not furnished with the brush-like pubescence at the back, by which in most of this order the pollen is carried out of the anther of the florets of the disk. *Germen* oblong, narrow, villous; *pappus* white, numerous, feathered.

CLITORIA Plumieri.

Plumier's Clitoria.

DIADELPHIA *DECANDRIA.*

Nat. ord. LEGUMINOSÆ. *Jussieu gen.* 345. *Div. V.* Cor. irregularis papilionacea. Legumen uniloculare, bivalve.

CLITORIA. Cal. (campanulatus) aut tubulosus 5-fidus, sæpè basi bibracteatus. *Cor.* supinata (vel non), vexillo magno alas et carinam obumbrante. *Legum.* longum compressum polyspermum, sæpè lineare. *Herbæ volubiles; folia ternata aut rariùs impari-pinnata, foliolis ut in* DOLICHO *articulatis et basi aristatis; stipulæ à petiolo distinctæ; pedunculi axillares* 1-2-*flori aut spicato-multiflori. An genere distinguendæ species ternatifoliæ.* Juss. loc. cit. 357.

C. *Plumieri,* foliis ternatis: foliolis ovato-oblongis acuminatis, calyce campanulato bracteis ovatis breviore: corolla sericea. *Persoon syn.* 2. 303.

Clitoria Plumieri. *Poiret supp. encyc. de Lamarck.* 2. 301.

Phaseolus amplo flore clypeato (peltato *in textû*), siliquis nigris et angulosis. *Plum. amer.* 94. *tab.* 108.

Phaseolus. *Aublet guian.* 2. *suppl.* 142; *(excluso Rumphio). Synonymon specimine archetypo Aubletii Insulâ Franciæ lecto in Herbario Banksiano cum exemplari* DOLICHI tetragonolobi *confuso affirmatum.*

Perennis, altè latèque procrescens: caulis *infrà crassitudine duplâ digiti, suberoso-rugosus rugis profundis flexuosis:* rami *teretes glabriusculi.* Fol. *semipedalia v. ultrà, membranacea, nervosa, lætè virentia,* foliolo *terminali subrotundo-ovato, infrà cuneato-angustato, longitudine* 3-*unciali ultràve, acumine brevi, lateralibus duplo angustioribus, oblongis, inæquilateris, acumine brevi:* petiolus comm. 3-*uncialis, cum ramo articulatus ac* partiales *cum illo:* stipulæ comm. 2 *oppositæ ovato-oblongæ acuminatæ,* partiales petiolulorum *subulatæ.* Pedunculi 1-3, *inæquales, axillares, stricti, ascendentes v. nunc directione foliorum contrariâ reclinato-divaricantes, villosi, plurimùm v. parùm breviores petiolo communi, subrubentes,* paniculâ *brevi* 5-*pluriflorâ terminati,* bracteis (2?) *conformibus cum stipulis sed minoribus ad basin.* Flores *ampli è disco intùs purpureo peripheriam versùs albicantes, erecti v. nunc resupinati, extùs sericeo-lanuginosi.* Cal. *brevissimus, tenuis, bracteis* 2 *lateralibus inclusus, pallidè virens, campanulatus, subquinquefidus, bilabiatus, lanuginoso-ciliatus;* labio altero *brevissimo truncato subbidentato-emarginato,* altero *plurimùm longiore trinervi trifido porrecto, segmentis acuminatis medio lanceolato valdè altiore lateralibus humillimis;* bracteæ partiales *utrique suo lateri appressæ et eo plus quàm duplo longiores, fermæ, erectæ, ovato-oblongæ, glabræ, tenuissimè lineolatæ, subvilloso-marginatæ, obtusæ apiculo villoso.* Vex. *subrotundum, emarginato-recurvum diametro subsesquiunciali v. ultrà, concolori striatum, erecto-reflexum,* unguis *carnosus, longitudine bractearum partialium, basi curvatus,* lamina *plicâ posticè calcarata calcareolo brevi conico acuto deflexo infra medium plicæ educto, intùs disco maculâ amplâ purpureâ alba-radiatâ notata, cæterum albicans:* alæ *cuneato-oblongæ, ascendentes, carinam latiorem longitudinalitèr complectentes, breviores vexillo, albæ, apicibus obliquè rotundatæ et purpureo notatæ, ultra carinam invicèm contingentes:* carina *subrotundo-falcata, compressa, trans imos alarum margines longiùs protuberans, apice ascendens, è petalis* 2 *subtùs cohærentibus, suprà apertis, obtusis,*

albis, apice purpureo-notatis. Stam. *diadelpha, reflexa;* fil. *alterum tubulosum compressum pro ¼ parte longitudinis 9-fidum rubescens dorso apertum, alterum simplex fissuræ posticæ prioris accumbens revolutum:* anth. *incumbentes, breves, oblongæ, subfuscescentes;* pollen *flavum.* Germ. *lineari-subtetragonum, angulis rotundatis, utroque lateri sulco medio exaratum, duplo longius calyce v. ultrà:* stylus *subæqualis germini v. longior, teres, abeuns in* stigma *angustè cuneatum transversè planum apice truncatum, summo margine lanuginosum, subtus concaviusculum.* Legum. *coriaceo-cartilagineum, fuscum, glabrum, semipedale, vix semunciam latum, lineari-elongatum, 2-valve, compresso-tetragonum angulis in aciem brevissimam cartilagineo-coriaceam undulatam attenuatis, latere utroque planum indeque vix latius quàm ad ventrem et dorsum quæ ambo invicèm æquilata, acuminatum, stylo persistente cuspidatum, glabrato-multiloculare dissepimentis membranaceo-cellulosis.* Sem. 13, *(fide Plumieri et Dom. Herbert) vix piso mediæ magnitudinis majora, fusco-fulvescentia.*

A species first observed by Plumier in the Island of St. Domingo; but though figured and described by him as far back as the year 1693, had never been incorporated with any general system of vegetables, until comprised by Persoon in his "Synopsis;" where it seems to have been determined from a sample collected at Porto Rico by Monsieur Turpin.

At the end of the supplement to the second volume of the History of the plants of Cayenne, by Aublet, that author has inserted a catalogue of the indigenous as well as exotic vegetables which he observed in the Isle of France during a stay he made there. This is indeed no more than a bare list of names, the synonyms from Rumphius's work being in great part, if not throughout, erroneous, and it would have been utterly useless, had not the original samples been preserved in the Banksian Herbarium under corresponding titles. Among these samples is one of the present species, which has however in the arrangement of that invaluable Herbarium been confounded with one of Dolichos *tetragonolobus*, from the East Indies; a species which may be seen to differ from the present at a glance, by a pod with 4 broad membranous curiously curled wings at the 4 corners, and by leaves where the leaflets are long-pointed and the lateral ones of the same shape as the terminal one. The list being composed indiscriminately of exotic and indigenous plants cannot be relied on as any authority in regard to their origin; and all we derive from this source is, that Aublet observed and collected a plant of the present species in the Isle of France.

The drawing was made from a plant first introduced by Mr. Herbert, and raised in his hothouse at Spofforth, from West Indian seed. Of two samples that gentleman kindly

transmitted to us, one had an upright, the other a resupinate or reversed flower, in both which positions we have shown it in the plate. Persoon having ranked the species in the present genus, of which a resupinate flower has been made an essential characteristic, we are led to suppose that he must have been determined in his decision by observing at least some of the flowers thus disposed on Monsieur Turpin's specimen from Porto Rico, for there are none shown in this way by Plumier's figure. But for that feature, we should think it would have been preferably arranged under Dolichos. Perhaps, however, when the two genera have undergone the reform they are known to require, this species will not be allotted to either?

With the samples of the blossom we received also the shell of the pod from which the seed that produced them was taken, and have been thus enabled to identify the plant beyond a doubt. It is among the most ornamental of the tribe. Requires to be kept in the hothouse, where it winds itself to the height of 12 or 14 feet, and produces its bloom at the upper part of the bractes during the months of October and November.

A twining suffrutescent perennial; *stem* at the lower part twice as thick as a finger, deeply furrowed, with flexuose corky ridges; *branches* round, and nearly smooth. *Leaves* about half a foot long, membranous, nerved, bright green; terminal leaflet roundishly ovate, rhomboidal at the lower part, shortly and abruptly pointed, three inches in length, side-ones twice narrower, oblong, shortly acuminated, with unequal sides: *general petiole* about three inches long, jointed where it joins the branch, as are the *partial ones* where they join with it: *general stipules* opposite ovately oblong sharp-pointed, *partial* ones subulate. *Peduncles* axillary, 1-2-3, but of unequal lengths, ascendent or divaricate and reclining, stiff, villous, much, or but little, shorter than the common petiole, reddish, terminated by a short *panicle* of 5 or more flowers, with two? *bractes* at the base of the same form as the stipules but smaller. *Flowers* large, purple and white, upright or reversed, downy on the outside. *Calyx* shallow, thin, pale green, campanulate, bilabiately 5-cleft or nearly so, with a downy fringed edge; *one lip* very short, repand with 3 faint indentations, the middle tooth nearly obsolete: *the other lip* much the longest, 3-nerved 3-cleft, with acuminated segments, of which the middle one is much longer than the two very

short side-ones: the whole concealed by two *partial bractes* that press closely on each of the sides, and are more than twice its length, herbaceous, subcartilaginous, smooth, ovately oblong, obtuse, with a villous edge and small villous point. *Standard* nearly round, emarginately recurved, an inch and an half across or more, streaked, reflexly upright; *unguis* or *petal-stalk* fleshy, narrow and cuneate, concave, as long as the bractes, curved at the base; *lamina* or *blade* spurred below the middle of the plait at the back by a short sharply conic deflectent spur, a broad whitely radiated purple spot spreading over the disk within, white at the circumference: *wings* cuneately oblong, bending towards the standard but rather shorter than that, embracing the keel lengthways, white, meeting altogether at the ends, where they are purple and obliquely rounded: *keel* bowed towards the standard, at the under side roundly falcate compressed, the curve protruding much below the lower edges of the wings, of two petals cohering underneath, open above, the length of the wings, white, purple at the top and obtuse. *Stamens* diadelphous, reflexly ascendent; *filaments:* one compressedly tubular 9-cleft for about one fourth of its length, reddish, the other simple and revolute: *anthers* short, incumbent or balanced, brownish, with deep yellow *pollen*. *Germen* linear, squarish with rounded corners, and a deeply engraven line along each side, twice longer than the calyx or more: *style* about the length of the germen or longer, round, ending in a narrowly cuneate transversely flattened *stigma* with a downy edged truncated top, rather concave at the under side. *Pod* about half a foot long, smooth, brown, linearly elongated, compressedly squared, not much broader at the sides that at the upper and under parts, with corners fining off to an even shallowly projecting undulated coriaceo-cartilaginous edge, the sides flat and even, end acuminated and pointed by a part of the persistent style, many-celled and entirely smooth on the inside, divided into one-seeded compartments by partitions of a membrano-cellular substance. *Seeds* 13, according to Plumier and Mr. Herbert, not much bigger than a common pea, and of a brownish yellow or tawny hue.

a The standard or vexillum. *b* One of the two wings or alæ. *c* The simple stamen. *d* The 9-cleft stamen. *e* The two partial bractes which enclose and conceal the calyx. *f* The calyx. *g* The germen and part of the style. *h* The stigma.

GALACTIA pendula.

Browne's Galactia.

DIADELPHIA *DECANDRIA.*

Nat. ord. LEGUMINOSÆ. *Jussieu gen.* 345. *Div. V.* Cor. irregularis papilonacea. Legum. 1-loc., 2-valve.

GALACTIA. Cal. 4-dentatus, 2-bracteatus. *Cor.* 5-petala, petalis omnibus oblongis; vexillo cæteris latiore, incumbente. *Stigma* obtusum. *Legum.* teres. *Sem.* subrotunda. *Michaux bor. amer.* 2. 61.

G. *pendula*, foliis ternatis, racemo erecto, floribus pendulis. *Persoon syn.* 2. 302.

Clitoria Galactia. *Linn. sp. pl.* 2. 1026. *Willd. sp. pl.* 3. 1070. *Hort. Kew. ed.* 2. 4. 301.

Galactia foliis ovatis glabris pinnato-ternatis, spicis elongatis terminalibus. *Browne jam.* 298. *t.* 32. *fig.* 2.

Phaseolus minor lactescens, flore purpureo. *Sloane jam.* 1. 188. *t.* 114. *fig.* 4.

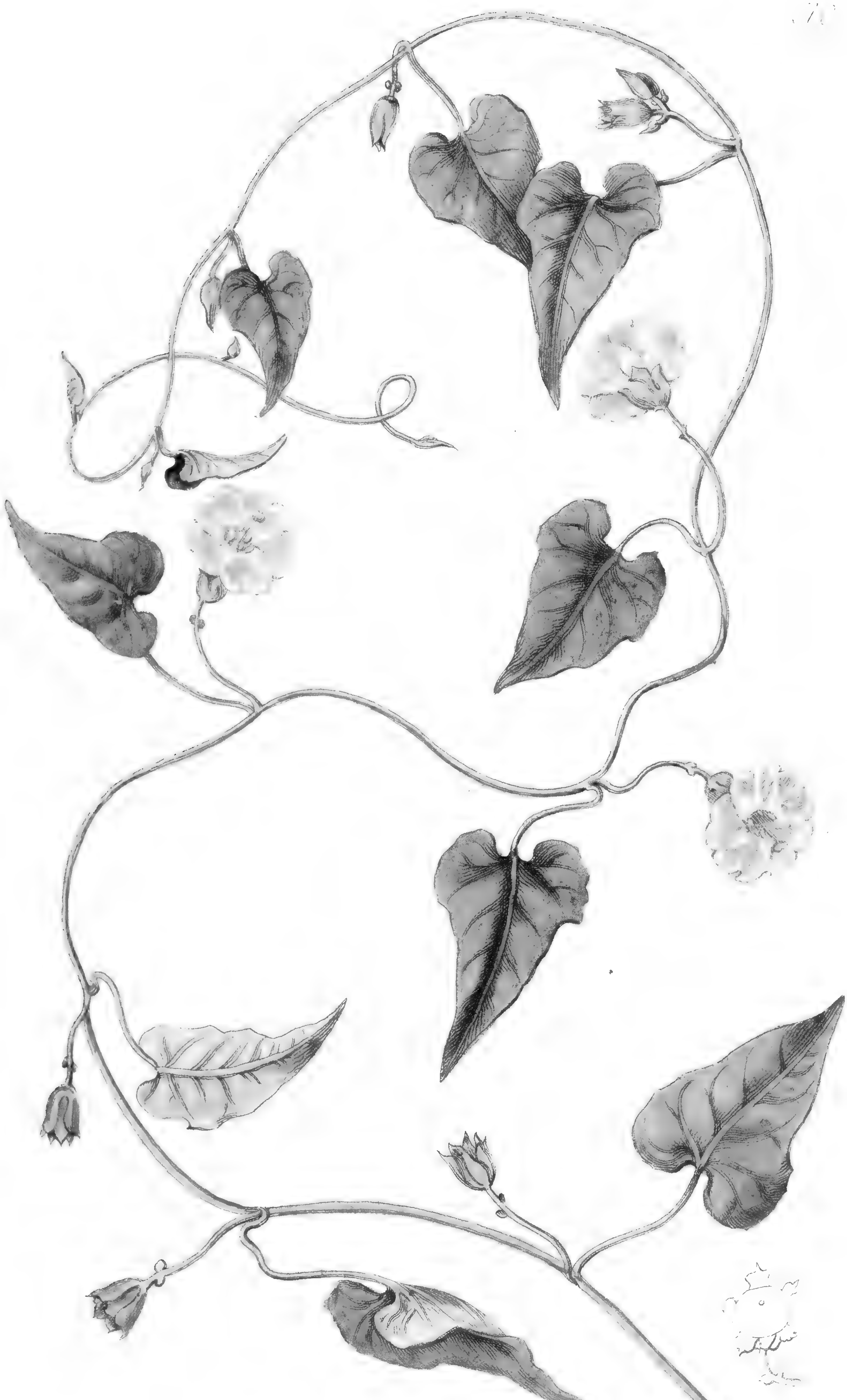
Frutex *lactescens? orgyalis* v. *ultrà, appressè villosus,* ramis *lignosis volubilibus teretibus.* Fol. *alternè distantia, ternata, sæpè deflexa, firma* v. *duriuscula, subtùs et ad petiolos villosa, suprà glabra;* foliola *ovato-oblonga, reticulato-venosa, terminale muticum subunciale, lateralia paulò minora mucronata;* petiolus *semunciam vix excedens;* stipulæ comm. *binæ oppositæ, distinctæ petiolo, subulatæ,* partiales *aristiformes.* Racemi *spicati, axillares, solitarii, erecti, indivisi, è fasciculis 3-pluribus subsecundis pendulis distantiùs compositi, 3-4-plo longiores foliis;* pedunculus *strictus, filiformis, villosus, vix ramo divergens, pede cinctus* bracteis 3? *villosis de dilatatâ base subulatis;* pedicelli *capillares breviores calyce aggregati singuli* bracteolâ *breviore subulatâ muniti, recurvati villosi.* Flores *supinati, subunciales, penduli, recti, elongato-oblongi, primò vividè rubentes tandèm sordidè pallentes.* Cal. *tenuis, membranaceus, pallidus, tubuloso-campanulatus,* 3-4-*linearis, bilabiato-4-fidus,* labio altero 1-*lobo ovato-lanceolato, majore,* altero 3-*lobo lobis lanceolatis, medio recurvato lateralibus longiore; basi exceptus* bracteolis 2 *minimis lanceolatis villosis appressis.* Pet. *æquilonga, tenuia, tenera:* vex. *cuneato-oblongum, obtusum, triplo ferè latius alis et carinâ, accumbens:* alæ *rectæ, elongato-oblongæ, lineari-angustæ, obtusæ, carinam complectentes;* car. *bifida, recta, obtusa, è petalis* 2 *alarum exactè similibus, imo margine partìm cohærentibus: petalorum omnium* ungues *breves, vexilli brevissimi.* Fil. *diadelpha, alternè subbreviora, recta, supernè erubescentia:* anth. *oblongæ, breves, luteæ.* Pist. *rectum:* germ. *polyspermum, subpedicellatum?, sericeum, lineari-angustum, compressum, utrinque versùs attenuatum:* stylus *albus, capillaris, glaber, subassurgens:* stig. *apiculus mimimus.*

This shrub has been described by Sloane and Browne in their natural histories of Jamaica, of which island it is a native, growing on inferior hills, where it is said to wind itself for the length of from 6 to 9 feet round the nearest support. By the latter writer the species was made the

subject of a separate genus, under the name of GALACTIA, suggested by the milky juice said to pervade every part of the plant. The genus was reduced by Linnæus to CLITORIA; has been since revived by Michaux; and we find our species restored to its original place by Persoon, in his Synopsis Plantarum.

The drawing was made from a plant raised by Mr. Herbert at Spofforth, from imported seed. It flowered in October, when specimens were obligingly forwarded to us. Introduced by Sir Joseph Banks in 1794.

Branches slender, round, woody, tawny green, covered by a short close-pressed fur. *Leaves* alternate, distant, ternate, often reflectent, villous underneath and at the petiole, quite smooth above and deep green; *leaflets* ovately oblong, firm and thickish, nettedly veined, end-one about an inch long or more, and about $\frac{2}{3}$ of an inch broad, pointless, side-ones a little smaller and mucronate; *petiole* about $\frac{1}{2}$ an inch long; *general stipules* 2, opposite, subulate, *partial ones* awnshaped. *Racemes* spiked, axillary, solitary, upright, loosely many-flowered, undivided, 3 or 4 times longer than the leaves, composed of distinct 3-or more-flowered pendulous fascicles tending to a same front; *pedancle* straight and upright, filiform, villous, scarcely diverging from the branch, furnished at the base by 3? brown villous bractes subulately narrowed from a broad base; *pedicles* capillary, shorter than the calyx, aggregated, villous, flexile, bowed downwards, each with a short subulate bractelet at the base. *Flowers* reversed, nearly an inch long, straight, oblong, pendulous, in the bud of a vivid pinkish red, fading as they expand from paler to dirty white. *Calyx* membranous, pale, villous, 3 or 4 lines long, tubularly campanulate, bilabiate, 4-cleft, *upper lip* of one ovately lanceolate lobe larger than the rest, *lower* of 3 distinct lanceolate lobes, middle one recurved and larger than its side-ones: traversed at the base by two lanceolate minute villous close-pressed deciduous bractes. *Petals* of one length, tender: *vexillum* cuneately oblong, nearly 3 times broader than the wings, accumbent: *alæ* straight, elongatedly oblong, narrow, obtuse, confining the keel between them; *carina* bifid, straight, obtuse, of 2 petals exactly like the wings: *ungues* all short. *Filaments* diadelphous, straight, reddish at top *Pistil* straight: *germen* many-seeded, silky, linear: *style* capillary, smooth: *stigma* a minute head. *Pod* about 2 inches long, narrow, with several seeds.



IPOMŒA chryseides.

Mr. Herbert's Ipomœa.

PENTANDRIA *MONOGYNIA.*

Nat. ord. CONVOLVULI. *Jussieu gen.* 132. *Div. I.* Stylus unicus.
CONVOLVULACEÆ. *Brown prod.* 481. *Sect. I.* Germ. 1.
IPOMŒA. *Suprà vol.* 1. *fol.* 9.

I. *chryseides*, foliis oblongo-cordatis angulari-acuminatis, nunc repando-subdentatis rarò obsoletè subtrilobis; pedunculis supernis tri- *(nobiscum abortû uni-)* floris brevioribus folio, infernis sub7floris 3-4-plo longioribus folio: calyce lævissimo, radiis multiplicibus atro-virentibus insignito, mucronato-retuso, rigidissimo.

Convolvulus. *Herb. Banks. Exemplar in Indiâ Orientali à Kœnigio lectum.*
Quoll-fa. *Chinensibus. Dom. Herbert in litt.*

Perennis, suffruticosa, gracilis, filiformi-ramosa, verruculis minutissimis tactui plus minus scabrata, cæterum nudiuscula, striata, fuscescens. Fol. *subsecunda, distantia, glabra,* $1\frac{1}{2}$ *unciæ longa, ubì latiora latitudine* $\frac{1}{4}$ *unciæ, nervo medio alios horizontali-ascendentes utrinque emittente:* petiolus *duplo ferè brevior folio v. illi subæqualis, suprà canaliculo subtilissimè villoso.* Pedunculi *solitarii, axillares, teretes, firmi, crassiores petiolis, erectiusculi, cymulâ trichotomâ 3-7-florâ terminati, sæpè ut rami granuloso-scabrati, in hortis nostratibus sæpiùs ob florum 2 lateralium abortum uniflori,* pedicellis *quinquiès sexièsve brevioribus illis, aliquandò flore altero axillâ trichotomiæ sessilis.* Cal. *campanulato-connivens, viridis, crassiusculus subcartilagineo-durus, radiis crebris verticalibus obscurè viridibus supernè divergentibus notatus, foliolis erectis latè cuneatis retuso-truncatis mucrone corniculiformi, 2? summo margine subciliatis.* Cor. *lutea, hypocrateriformis, tubo et plicis limbi extùs rubro-fulvescente lineisque pallidis notata;* tubus *altior calyce, intùs infernè pilosus:* limbus *rotatus diametro subsemunciali, brevissimè 5-lobus, rotundatus absque omni angulo lobis emarginatis.* Anth. *ovato-oblongæ, incumbentes.* Stig. *granuloso-globosum, longiùs exsuperans stamina.*

It may certainly be imputed to the distinctions which have been of late adhered to in deciding between IPOMŒA and CONVOLVULUS, that their adoption has been arbitrary and empirical; and that generic marks have been assumed independently of their controul over the habit of either group. But besides answering in point of convenience, we find them in fact at least so far consequent, as that they are seen to determine the exclusion of the former genus from within the boundaries of Europe, where the latter ranges throughout by various species.

Among the unnamed specimens of CONVOLVULUS in the Banksian Herbarium, we find two of the present species,

gathered in the East Indies by Kœnig. The one from which the drawing is made, was raised by Mr. Herbert at Spofforth, from seed which that gentleman informs us came from China, under the vernacular name we have quoted. It is not to be traced in any recorded species, and most probably has been now first introduced into our European gardens. The plant is twining and perennial; blossoms plentifully and in long succession during the winter, rarely and sparingly during the summer.

Stem slender, round; *branches* filiform, spirally streaked, in some parts roughish to the touch, owing to a minute warty or granular efflorescence. *Leaves* nearly in one rank, wide-set, smooth, oblong, cordate, angularly acuminated, generally undivided, at times faintly three-lobed below the middle, often repand and more or less denticulated, about an inch and one third in length, nearly $\frac{3}{4}$ of one broad at the widest part, middle nerve branching each way horizontally: *petiole* sometimes nearly equal to the leaf, often much shorter, slender, grooved on the upper side, groove minutely villous. *Peduncles* solitary, axillary, round, nearly upright, firm, thicker than the petiole; *upper ones* shorter than the leaf, terminated by a short trichotomously three-flowered cyme (having generally only one flower with us from the failure of the two of the sides before they expand); *lower ones* 3-4-times longer than the leaves, generally with a 7-flowered cyme, and usually with one flower sessile in the fork of the trichotomy; *pedicles* 5-6 times shorter than the peduncle. *Calyx* campanulate, thickish, of a subcartilaginous hardness, green, very smooth, shot or rayed longitudinally with numerous dark streaks, which are slightly divergent near the top, leaflets broadly cuneate, straight, truncatedly retuse with a mucro or point in the centre of the sinus; two? slightly fringed at the upper edge. *Corolla* yellow, hypocrateriform, on the outside of the tube and of the plaits of the limb of a reddish tawny colour, streaked with paler lines: *tube* higher than the calyx, pubescent near the bottom on the inside: *limb* rotate, about half an inch in diameter, rounded without the appearance of any angle, lobes exceedingly shallow emarginated or notched. *Anthers* ovately oblong. *Stigma* granulated, globular, elevated much above the anthers.

GOODYERA discolor

Brasil Goodyera.

GYNANDRIA *MONANDRIA.*

Nat. ord. Orchideæ. *Jussieu gen.* 64. *Brown prod.* 309.

Div. II. Anthera stigmati parallela persistens. *Massæ pollinis* v. farinaceæ v. è corpusculis angulatis; apicibus stigmati affixæ. *Brown in Hort. Kew. ed.* 2. 5. 197.

GOODYERA. Cor. ringens: petalis exterioribus anticis labello infernè gibboso supernè indiviso suppositis. *Columna* libera. *Pollen* angulatum. *Brown loc. cit.*

Div. II. Petalis exterioribus anticis horizontali-patentibus.

G. *discolor*, rhizomate horizontali, caudescente, foliis discoloribus ovalibus crassiusculis, spica multiflora, ungue labelli ad basin bullato-didymo adnatoque laminâ transversè oblongâ.

Rhizoma *carnosum subrepens, radicato-caudescens, cylindricum crassitudine digiti, foliorum vestigiis annulatum, fusco-sanguineum, supernè foliosum, indivisum.* Folia *ambientia, sparsa, discolora, vaginoso-peliolata vaginâ sanguineo-rubente;* lamina *crassiuscula, ovalis, utrinque attenuata, acuminata, subtriuncialis, suprà papillis atomoideis densis lucido-pruinata, atro virens aliquâ irrepente rubedine, subtùs glabrata punicea longitudinalitèr nervosa nervorum intervallis flexuoso-venosa.* Scapus *simplex erectus cylindraceus, subpedalis, teres crassitudine tubi pennæ scriptoriæ vel majore, albo-hirsutus, bracteis aliquibus vacuis florum majoribus appressis hìc indè munitus.* Spica *simplex, erecta, cylindracea, subtriuncialis, laxiùs multiflora.* Bracteæ *membranosæ, rubicundæ, pruinoso-micantes, lanceolato-acuminatæ, convolutæ, longiores germine, 3-nerves, erectæ, cuspidatæ, subcultatæ.* Flores *supinati, nutantes, sessiles, nivei, cruciato-ringentes, ¾ partes unciæ transversi:* germ. *semunciale, album, hirsutum, tortum, apice flexum, sublongius corollâ:* cor. *tetrapetaloidea;* pet. *æquilonga, exteriora pruinoso-opaca, interiora pruinoso-lucida;* galea *ovato-elliptica, erecta, obtusa, disco extrorsùm gibbosa, formata petalis* 2 lateralibus interioribus *dimidiato-lanceolatis angustis cum* mediâ *ovali duplo latiori ad suum marginem utrinque imbricato-subcohærentibus;* pet. 2 exteriora lateralia *oblongo-ovata acumine obtuso, horizontali-divaricata, rictum floris exactè decussantia, angustiora galeâ, deorsùm obliquata lateribus modo tali depressis ut promineat discus, extùs apice maculâ parvâ cinnamomeo-rubente notata;* labellum *difforme, indivisum, concolor, unguiculatum;* unguis *3-plo magìsve longior laminâ, lineari-oblongus, subtubuloso-convolutus, à sacculo brevissimo didymo-hemisphærico anticè bibullato-protuberante adnatus basi columnæ;* lamina *brevis transversè oblonga integerrima apiculo obsoleto, basi levissimè subcordata, glabra.* Columna *alba, duplo ferè brevior corollâ, libera, erectiuscula, infernè cylindrica, suprà posticè subdidymo-gibbosa, flavescens, lucida, vertice depresso:* anth. *opercularis, persistens, bilocularis, receptaculo oblongo acuminato antrorsùm incumbente processû glanduloso rostellatìm producto atque areolam papulosam secernentem* stigmatis *paralleli obumbrante:* massæ pollinis *binæ sulphureæ pedicellato-clavatæ, è lobulis obversis pressione angulosis axim elasticam glutinosam imbricatìm contegentibus conflatæ. Differt* Goodyeris *veris habitû valdè robustiore atque carnosiore, charactereque tenùs ex petalis 2 extimis alarum instar dispansis, neque labello suppositis atque collaterali-conniventibus; aliàs verò plurimùm cum genere consentit.*

An unrecorded orchideous species, recently introduced from the Brasils by Messrs. Lee and Kennedy, of the Hammersmith Nursery, where the drawing was taken from a plant that flowered in the hothouse in January last. We have enrolled it under GOODYERA, notwithstanding the disagreement in regard to a characteristic that has been proposed as essential to that genus; viz. the convergence of the two exterior front segments of the corolla under the label, which two segments are here widely divergent, and extended like wings. In general resemblance, however, the plant approaches too near to GOODYERA to suggest the expediency of originating a new generic group from it, especially as that genus is still sparingly stocked with species. A very slight modification of the present generic character will make room for our plant.

Rootstock fleshy horizontal, cylindrical, about the thickness of a man's finger, scored in circles by the scars of the fallen leaves, blackish red or liver-coloured, caudescent and radicant upwards, unbranched, leafy at the top. *Leaves* scattered all round, two-coloured, sheathingly petioled, sheaths red, *blade* thickish, oval, tapered both ways, acuminate, about 3 inches long, finely and shiningly chagreened, blackish green on the upper side, on the under smooth, and crimson-coloured, longitudinally nerved, flexuosely veined in the intervals of the nerves. *Scape* terminal, upright, stiff, about a foot long, of the thickness of a pen or thicker, round, covered by a white fur, furnished here and there with barren close-pressed bractes larger than those of the inflorescence. *Spike* simple, upright, cylindrical loosishly manyflowered, about 3 inches long. *Bractes* membranous, red, glitteringly frosted, lanceolately acuminate, convolute, longer than the germen, 3-nerved, upright, sharp-pointed, slightly fringed. *Flowers* reversed, nodding, sessile, white, crucially ringent, about $\frac{3}{4}$ of an inch across: *germen* twisted half an inch long, bent at the top, rather longer than the corolla, white-furred. *Corolla* appearing as of 4 segments only; *segments* of one length, outer opaquely frosted, inner shiningly frosted; *casque* ovately elliptic, upright, obtuse gibbous at the back, formed of 2 lateral narrow paraboli-cally lanceolate interior segments that lap over and adhere by their innost edge to each side of a middle oval one of twice their own breadth; 2 *exterior lateral segments* oblongly ovate with a rounded point, horizontally spread, intersecting the ricture of the flower transversely, slanting

downwards, narrower than the casque, disk convex, edge depressed, with a small cinnamon spot at the top on the outside: *label* all white, biformed, undivided, unguiculated, *unguis* 3 times as long as the blade or more, oblong and straight-sided, subtubularly convolute, affixed to the foot of the front of the column by a very shallow didymous pouch, resembling the heads of two very small studs; *blade*, shallow transversely oblong, entire, with a scarcely perceptible point, shallowly cordate at the base, smooth. *Column* white, almost twice shorter than the corolla, quite detached, nearly upright, cylindrical at the lower part, upwards at the back enlarged by a double protuberance, yellowish, polished, depressed at the summit: *anther* lidshaped, permanent, of two cells, with an oblong acuminated receptacle, the point of which rests upon the beakshaped process that overhangs the parallel slanted *stigma*: *pollen-masses* 2, pale-yellow, pedicled, clavate, composed of obversely oblong angularly pressed lobules collected round an elastic glutinous axis.

PYRETHRUM fœniculaceum.

Fennel-leaved Feverfew.

SYNGENESIA *POLYGAMIA SUPERFLUA.*

Nat. ord. Corymbiferæ. *Jussieu gen.* 183. *Div. III. Recept.* nudum. *Sem.* nudum seu non papposum. *Flores* radiati.

PYRETHRUM. Recept. nudum. *Pappus* marginatus. *Cal.* hemisphæricus, imbricatus; squamis acutiusculis, margine scariosis. *Smith flor. brit.* 2. 900.

P. *fœniculaceum*, foliis pinnatifidis, carnosis, laciniis linearibus integerrimis, pedunculis elongatis subcorymbosis, caule fruticoso. *Willd. enum.* 903; *pede pag. in notâ.*

Chrysanthemum fœniculaceum. *Broussonnet ined.*

Caulis *fruticosus, ramosus;* rami *teretes, subangulosi, ascendentes, corymboso-fastigiantes, supernè herbacei, foliosi.* Fol. *numerosa, ambientia, sparsa, proxima, laxa, erecto-patentia, glauca, carnosa, linearia, pinnatifida, suprà plana nervo medio conspicuo, 3-4-uncialia, segmentis oppositis v. subalternis, distantissimis, integerrimis, mucronato-acutis, imis 2 medio axili similibus subæqualibusque, summis 2 triplo brevioribus ultràve; suprema v. floralia ternata vel simplicissima.* Flores *plures* (4-6), *in summis foliis axillares, distantèr corymbosi;* pedunculi *solitarii, uniflori, graciles, anguloso-striati, longiores foliis, erecti.* Flos *sesquiunciam transversus, inodorus, radio albus:* cal. *brevis, hemisphæricus, glaber, arctissimè imbricatus,* foliolis *internè versùs gradatìm majoribus, margine scariosis, intimis cum laminâ scariosâ fuscâ rotundatâ, extimis minimis subulato-ovatis convexis glaucis:* radius *duplo ultràve latior disco;* flosc. *lineari-oblongi, angusti, bisulci, binerves, disco convexo-prominentes, obtusi, tridentati, marginibus reflexi,* tubo *brevi virente glanduloso-pubescente;* stigmata 2 *exserta, lutea, brevia, linearia, revoluta, apice non pubescentia, intùs canaliculata:* discus *flavus;* flosc. *breves, vel æquales tubis radii micantèr pruinosi, tubo crassiusculo curvo, fauce cylindracco-campanulatâ, laciniis* limbi *angulari-ovatis recurvo-patentibus duplo brevioribus fauce;* stigmata 2 *flava, revoluto-replicata, brevia, linearia, intus canaliculata, apice dilatata atque pubescentia.* Germ[a]. *radii elliptica, glaberrima, extùs convexa, intùs concava, tricostata costis membranoso-alatis denticulatis, 2 lateralibus, alterâ mediâ introrsum prominente:* pappus *margo brevis membranosus dentato-inæqualis obliquatus:* germ[a]. disci *oblonga, deorsùm attenuata, tetraquetra angulis membranoso-alatis at obsoletiùs radii;* pappus *radii ferè similis.* Receptac. *viride, nudum, elevatum, conicum.*

A shrubby species, native of the Island of Teneriffe, where it was observed by M. Broussonnet, and first published by Willdenow, in the Catalogue of the plants in the Berlin Garden. The drawing was made at the nursery of Messrs. Whitley, Brame, and Milnes, at Fulham. The plant has been recently introduced from Berlin. Not to be found in any general system of vegetables.

Stem shrubby, branching; *branches* round, slightly angular, ascendent, somewhat corymbose, herbaceous at the upper part, leafy. *Leaves* numerous, scattered round, near, uprightly spreading, glaucous, fleshy, linear, pinnatifid, flat above with a faintly raised middle nerve, 3 or 4 inches long, segments opposite or sometimes alternate, very distant, quite entire with a sharp point, the two lowermost about equal to and exactly like the main or middle part, the 2 uppermost three times shorter than the other or more; leaves next the flowers ternate or sometimes quite simple. *Flowers* several (4-6) in the axils of the top leaves, disposed in a wideset corymb; *peduncles* solitary, one-flowered, slender, fluted, longer than the leaves, upright. *Flower* about an inch and an half across, scentless, with a white ray: *calyx* shallow, hemispherical, smooth, closely imbricant, *leaflets* increasing gradually in size in the inner ranks, scariose at the edge, the innost of all rounded with a brown scariose blade, outermost very small, subulate, convex, glaucous: *ray* twice broader than the disk or more; *florets* linearly oblong, narrow, two-furrowed, two-nerved, convex along the middle, obtuse, three-toothed, bent back at the edges, *tube* short, green, glandularly pubescent; *stigmas* 2 protruded, yellow, short, linear, revolute, not pubescent at the top, channelled on the inside; *disk* deep yellow, *florets* short, about even with the tubes of the ray, glitteringly frosted, *tube* curved thickish, *faux* campanulate, segments of the limb angularly ovate spreading, recurved, twice shorter than the faux; *stigmas* 2, deep yellow, revolutely divergent, short, linear, channelled on the inside, widened and pubescent at the tips. *Germens* of the ray elliptic, quite smooth, convex on the outside, concave on the inside, three-ribbed, rib membranously winged and toothed, 2 at the sides, one along the middle fronting inwards: *pappus* a short membranous unequally toothed slanting border: *germens of the disk* tapering downwards 4 cornered with membranous angles, but shallower than in the germens of the ray; *pappus* very like that in the ray. *Receptacle* green, naked, raised, conical.

A greenhouse plant of easy culture and propagation.

ASTER grandiflorus.
Catesby's Star-wort.

SYNGENESIA *POLYGAMIA SUPERFLUA.*

Nat. ord. CORYMBIFERÆ. *Jussieu gen.* 177.
Div. II. Receptaculum nudum. Semen papposum. **Flores radiati;** *(in* Tussilagine *et* Senecione *flores partìm flosculosi.)*
ASTER. Suprà vol. 3. *fol.* 183.

Div. Herbacei foliis linearibus lanceolatisve integerrimis.

A. *grandiflorus*, foliis linearibus rigidis acutiusculis subamplexicaulibus, rameis reflexis, margine ciliato-hispidis, caule ramoso hirto, ramis unifloris, calycinis squamis squarrosis lineari-lanceolatis. *Pursh amer. sept.* 2. 550.

Aster grandiflorus. *Linn. sp. pl.* 2. 1231. *Mill. dict. ed.* 8. *n.* 15. *Hort. Kew.* 3. 200. *ed.* 2. 5. 55. *Willd. sp. pl.* 3. 2033. *Michaux bor. amer.* 2. 111. *Hoffm. phyt.* 1. 65. *t. A. fig.* 1.

Aster caule corymboso, foliis lanceolatis reflexis, floribus solitariis, calycibus patulis. *Mill. ic.* 188. *t.* 282.

Aster caule corymboso, foliis lingulatis reflexis, floribus solitariis, calycibus squarrosis. *Gron. virg. ed.* 2. 124.

Aster grandiflorus asper: squamis reflexis. *Dill. elth.* 41. *t.* 36. *fig.* 41.

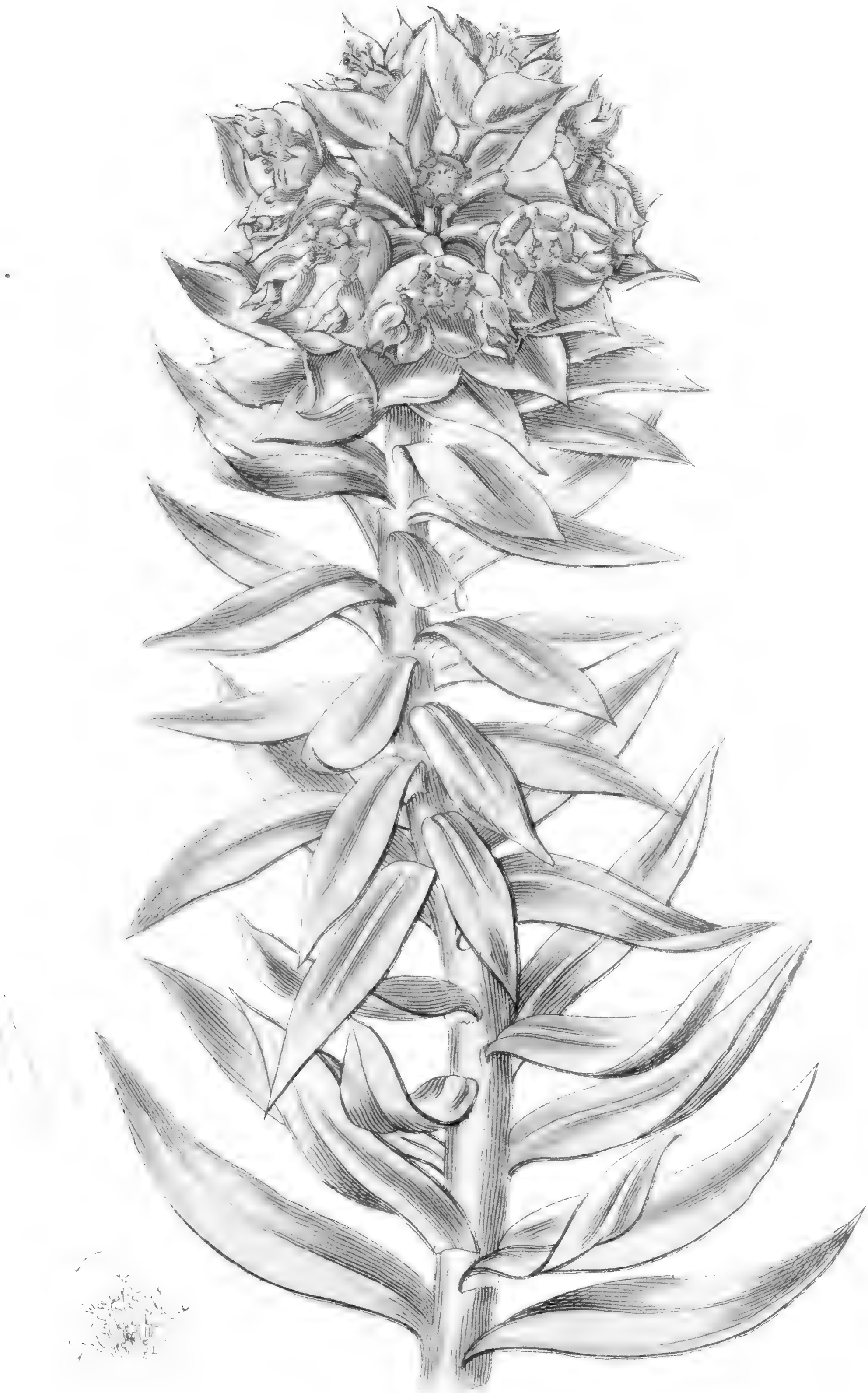
Aster virginianus pyramidatus, buglossi foliis asperis, calycis squamulis foliaceis. *Mart. cent.* 19. *t.* 19; *(malè).*

Radix *perennis.* Caulis *herbaceus, erectus, strictus, 2-pedalis v. ultrà, teres, hispidus, fusco-rubescens, paniculato-ramosus;* rami *subthyrsoideo-digesti numerosi, striati, hispidi, axillares, patentes, foliosi, simplices v. divisi, flore solitario terminati, rigidi.* Fol. *sparsa, numerosa, sessilia, lineari-lanceolata v. sublingulata, reflexa, acuta, hispida, subtùs albicantia.* Flores *violaceo-purpurei, sesquiunciam vel circà transversi.* Cal. *subrotundus, squarrosus;* foliola *lineari-lanceolata v. sublingulata, angusta, glanduloso-ciliata, apice rubentia, mucronata cum nervo medio, interiora tenuiora, angustiora:* flosc. radii *fœminei, obversè lanceolati, concaviusculi, 2-3-dentati, plicato-striati,* tubus *brevis subpilosus viridescens;* flosc. disci *hermaphroditi, luteo-virentes, clavati:* limbus *erecto-patens laciniis brevibus acutis extàs pilosiusculis,* tubus *brevis gracilis paràm angustior fauce.* Antheræ *flavescentes striis apicibusque purpureo-fuscescentibus acutis.* Stig. *in* fœm. 2 *æqualia linearia sulcata erecta furcata obliqua, viridi-lutescentia, subpubescentia; in* hermaph. *lutescentia, conniventia, spathulata, pubescentia.* Germen *in utrisque oblongum densè pilosum:* pappus *flosculis disci brevior, ad lentem subciliatus.* Recept. *planiusculum, nudum, alveolatum; alveolarum marginibus acutis dentatis membranosis.*

Native of North America; first cultivated with us in 1720, having been introduced from Virginia by Mr. Mark Catesby. It is a hardy perennial, and flowers in our gardens in November; but from the lateness of the season the flowers seldom appear in perfection, unless the stems have been cut

off and placed in the house in water, when they will expand completely, and last for a long time in beauty. We have taken the above technical description chiefly from a paper in Hoffmann's "Phytographische Blätter," published at Göttingen. The drawing was made at the nursery of Messrs. Whitley and Co. Fulham.

Stem herbaceous, upright, straight, two feet or more in height, round, hispid, brownish red, paniculately branched; branches numerous, fluted, hispid, axillary, spreading, leafy, simple or divided, stiff, terminated by one flower each. *Leaves* scattered, numerous, sessile, linearly lanceolate and generally somewhat spatulate, reflex, sharp-pointed, hispid, whitish underneath. *Flowers* of a deep purplish blue, about an inch and an half across. *Calyx* roundish, squarrose, *leaflets* linearly lanceolate, narrow, glandularly ciliate, red at the tips, pointed, with a nerve along the middle, inner ones thinner and narrower: *florets of the ray* pistil-bearing, obversely lanceolate, slightly concave, 2-3-toothed plaitedly streaked, *tube* short, slightly pubescent, greenish: *florets of the disk* with stamens and pistil, greenish yellow, clavate, *limb* uprightly spreading, with short pointed segments slightly pubescent on the outside, *tube* slender, short, nearly the width of the *faux*. *Anthers* deep yellow with brownish purple streaks and pointed tops of the same colour. *Stigmas in the ray* greenish yellow, linear, grooved, upright, forked, slanting, very slightly pubescent; *in the disk* yellow, converging, spatulate, pubescent. *Germens* oblong, with thick hair: *pappus* shorter than the florets of the disk, when magnified somewhat feathery. *Receptacle* naked, flattish, pitted, the pits bordered by a sharply toothed membrane.



EUPHORBIA rigida.

Tartarian Spurge.

DODECANDRIA *TRIGYNIA.*

Nat. ord. EUPHORBIÆ. *Jussieu gen.* 385. *Div.* Styli plures definiti, sæpiùs tres.

EUPHORBIA. *Suprà vol.* 3. *fol.* 190.

Div. Floribus umbellatis: calycinis segmentis bicornibus s. lunatis.

E. *rigida*, umbellâ multifidâ bifidâ, foliis lanceolatis mucronato-pungentibus coriaceis multifariàm imbricatis margine lævibus, involucellis reniformi-cordatis, petalis dilatatis crenulatis, capsulis glabris. *Marsch. Bieb. fl. taur. cauc.* 1. 375.

Euphorbia pungens. *Herb. Banks. Exemplar à P. Russell M. D. in montibus Syriæ lectum.*

Planta perennis, rigida, glauca. Caules *simplices, aggregati, pedales ad sesquipedales, teretes, calamum crassi, albido-virentes, hìnc indè aliquo rubore suffusi.* Fol. *elongato-oblonga, lanceolata acumine producto pungente, crassiuscula, coriacea, avenia, glauca margine lævi, longiora biuncialia, maximùm semunciam v. circà lata, patentia, sparsè ambientia, numerosa, laxiuscula, decrescentia.* Umbella *sub-8-fida, subsesquiuncialis, terminalis, flavo-virens, hinc indè fusco-fulvescens.* Involucrum *polyphyllum, patentissimum, brevius umbellâ,* foliola *cuneato-oblonga, vix duplo latiora quàm longa acumine brevi innocuo.* Umbellulæ *trifidæ, flore medio masculo breve pedicellato, lateralibus hermaphroditis subsessilibus.* Involucella *diphylla, rhombeo-cordata, tenera mucrone molli, primaria $\frac{2}{3}$ unciæ alta, secundaria infra semiunciam.* Flores *magnitudine ferè* Ribium, *graveolentes.* Cal. *turbinatus pallens 5-fidus, segmentis erecto-conniventibus, brevibus, subrotundis, margine crenulato-lanuginosis, æquantibus petala.* Pet. 4, *glanduloso-incrassata, extra calycem rotato-patentia, transversè oblonga v. obsoletissimè reniformia, integerrima, sub anthesi facie interiore madentia saturatèque flavicantia, bicornia cornubus ex angulis marginis superioris subtùs eductis, clavato-teretibus, interdùm connato-geminis triplicibusve.* Stam. *in* hermaph. 12; anth. *didymæ loculis globosis:* poll. *flavum.* Germ. *oblongiusculum, glabrum, rotundatè 3-gonum,* stipite *æquante calycem:* styli 3, *fasciculati, virides, sublongiores germine,* stigmatibus *brevibus bifidis lobulis subrotundis planiusculis saturatè viridibus.*

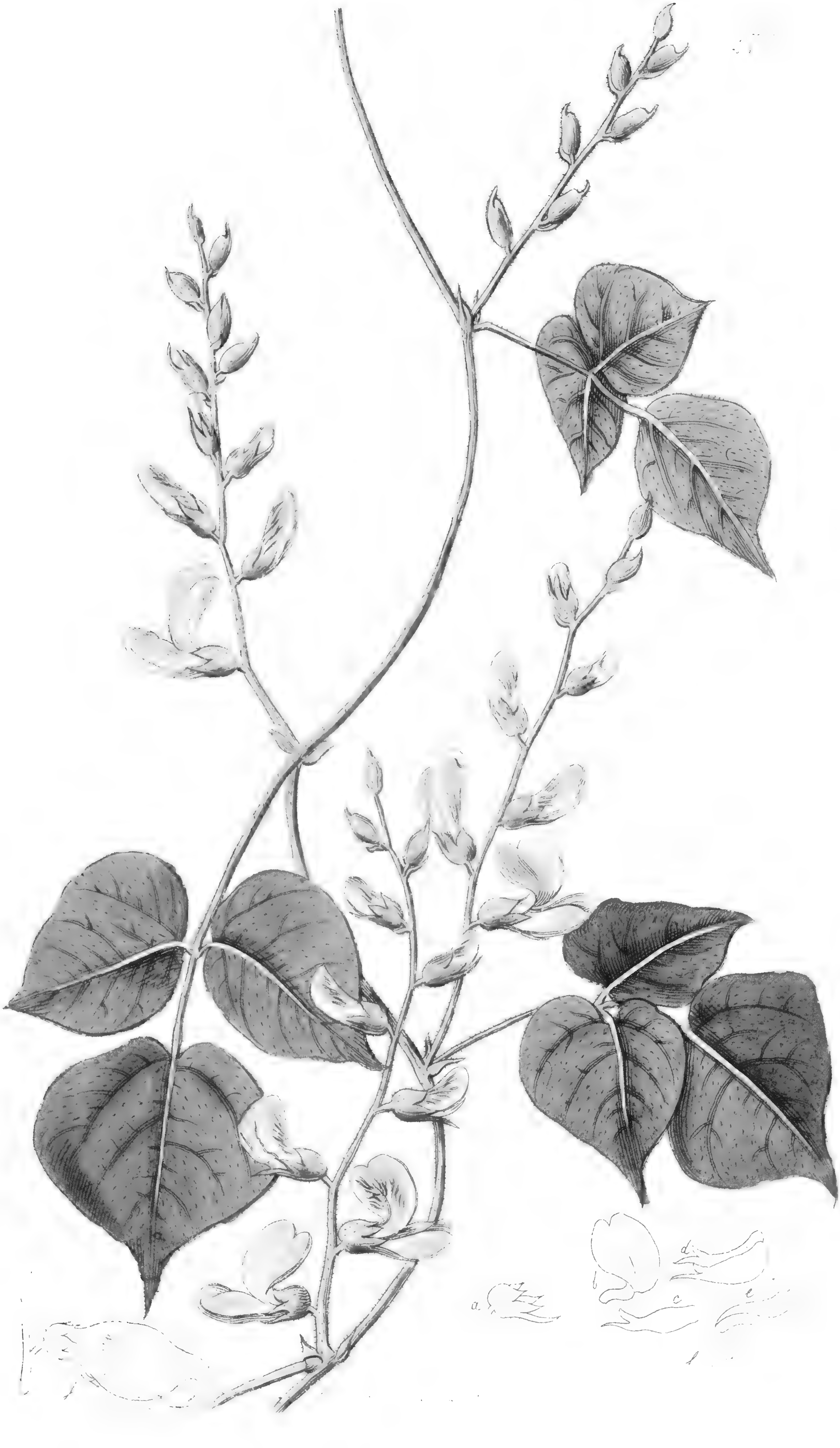
A species observed by M. Marschall von Bieberstein in Southern Tartary, growing in dry spots on the cliffs of the Black Sea. A specimen, found by Dr. Patrick Russell on the mountains of Syria, had however been long ago deposited in the Banksian Herbarium, by the name we have cited; but the species was not published until it appeared in the "Flora Taurico-Caucasica," and has not been even yet inserted in any general enumeration of vegetables. It resembles EUPHORBIA *Myrsinites* in many respects, but

differs by upright taller stems, longer narrower leaves, even at the edge and not cartilaginously serrated as in that, by a straight prickle at the end of these instead of a slantingly hooked one, nor are the general and partial involucres finely serrated at the edge as there; the segments of the calyx also are here more conspicuously uneven at the edge.

The plant has been very recently raised by Mr. Knight, nurseryman in the King's Road, Chelsea, from seed received from Moscow.

Mr. Marschall has denominated "calycine segments" the parts that have been termed "petals" by others, and vice versâ.

A stiff glaucous perennial plant. *Stems* aggregated, simple, from a foot to a foot and half high, round, about as thick as a common pen, greenish white, here and there stained with purple. *Leaves* elongatedly oblong, lanceolate, tapered and pointed by a small prickle, thickish, leathery, veinless, glaucous, even at the edge, longer ones about 2 inches long, broadest half an inch wide, spreading, scattered all round, numerous, loosishly set, diminishing in size as they ascend the stem. *Umbel* generally 8-rayed, about an inch and an half long, terminal, greenish yellow, here and there shaded with tawny brown. *General involucre* of many leaflets, widespread, shorter than the umbel, *leaflets* cuneately oblong, with a small soft prickle. *Partial umbels* 3-rayed, middle flower stamenbearing shortly pedicled, side-ones with both stamens and pistil, subsessile. *Partial involucres* two-leafletted, rhomboidally cordate, tender. *Flowers* about the size of those of the common currant, of an unpleasant smell. *Calyx* turbinate, pale, 5-cleft, segments uprightly convergent, short, roundish, crenulate and downy at the edge, about equal to the petals in depth. *Petals* 4, glandularly thickened, rotately expanded on the outside of the segments of the calyx, transversely oblong or very faintly reniform, deep yellow, entire, wet and clammy at the inner surface, two-horned, horns clavate, issuing from under the corners of their front edge, sometimes doubly, sometimes triply headed. *Stamens* 12 in the primary flowers: *anthers* twin, with globular cells: *pollen* yellow. *Germen* somewhat oblong, smooth, roundedly 3-cornered: *styles* 3, fascicled, green, rather longer than the germen, with short two-cleft *stigmas*, the lobes of which are of a deep green colour, flattish and roundish.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GLYCINE caribæa.

Trailing Glycine.

DIADELPHIA *DECANDRIA.*

Nat. ord. LEGUMINOSÆ. *Jussieu gen.* 345. *Div. V. GLYCINE.* *Suprà vol.* 3. *fol.* 261.

G. *caribæa*, foliis ternatis ovato-rhombeis subtùs resinoso-punctatis, racemis folio longioribus, leguminibus acinaciformibus dispermis hirsutis, caule volubili. *Willd. sp. pl.* 3. 1064.

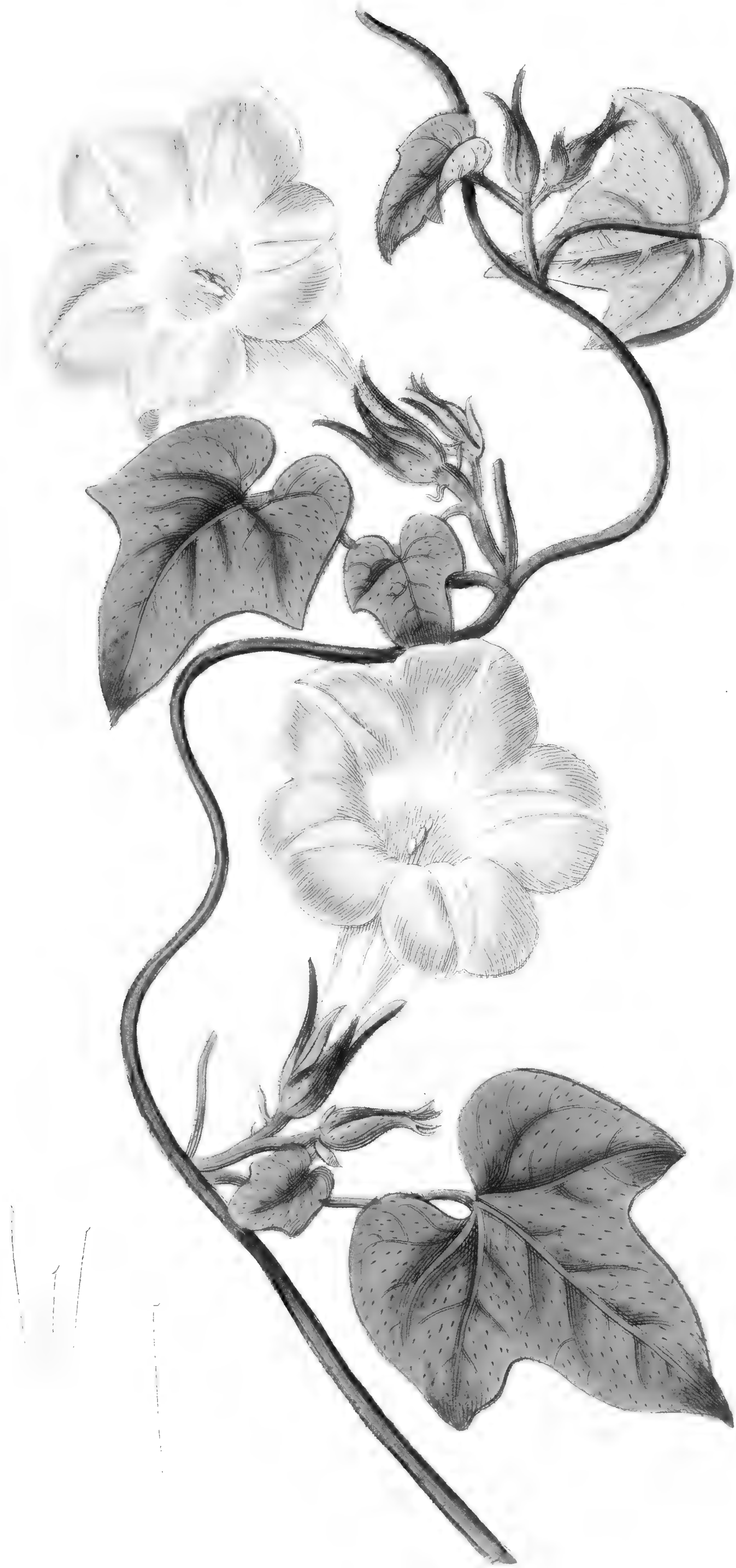
Glycine caribæa. *Jacq. ic. rar.* 1. *t.* 146. *Collect.* 1. 66. *Hort. Kew.* 3. 34. *ed.* 2. 4. 298.

Frutex *volubilis ;* caules *lignosi, cinerei, calamum crassi et glabri ;* (Jacq.) *reliqua planta viscoso-pubescens :* rami *virentes, hirtiùs villosi, teretes.* Folia *distantèr alterna, 2 uncias paulò excedentia, lætè virentia, pilosiuscula pilis glandulâ minutâ insitis, subtùs efflorescentiâ resinosâ conspersa ;* foliola *subrotundo-rhombea, angulari-acuminata acumine producto obtusulo, ramoso-nervosa, reticulato-venosa, terminale subunciale, lateralia ferè duplo minora, inæquilatera latere interiore angustissimo, brevissimè petiolata :* petiolus communis *longior foliolo terminali, strictiusculus, hirsutè villosus, suprà canaliculatus basi articulatus et cum foliolis :* stipulæ 2 *oppositæ, ovato-lanceolatæ, breves, virides, erecto-patentes, extùs glanduloso-pilosæ, nervoso-striatæ ;* partiales *nullæ.* Racemi *axillares, solitarii, rariùs divisi, longiores foliis, erecti, pluri-multi* (4-20)*-flori,* 3-5*-unciales :* pedunculus *gracilis, villosus, flexuosus ;* flores *subsemunciales, flavi, brevissimè pedicellati ;* pedicelli bracteâ *parvâ ovatâ acutâ herbaceâ pubescente caducâ ad basin stipati (flos terminalis bracteâ alterâ superiore subulatâ).* Cal. 4*-partitus pallidè virens, glanduloso-pubescens, duplo brevior corollâ, bilabiatus, subcompressus ;* labium superius *brevius ovato-attenuatum dorso profundè convexum gibbosum apice bifidum lobulis acutis,* inferius *rectum trifidum segmentis lanceolato-subulatis, imo medio lateralibus duplo longiore.* Corollæ petala *æquilonga ;* vex. *striatum, reflexum, obcordato-rotundum, extùs villosum, striis purpureis incompletis pictum, basi laminæ anticè supra unguem carunculâ viridi semicirculari-prominulâ munitum, indèque utrinque convoluto-auriculatum ;* ungue *longitudine calycis convexo :* alæ *oblongæ, biunguiculatæ,* 3*-plo angustiores vexillo, carinam concludentes, fulvescentes, obtusæ :* car. *porrecta, subfalcata, venosa, pallida, inflatiuscula, subventricosa, obtusissima, suprà aperta, infrà partìm cohærens, petalo utroque apice purpureo-maculato.* Fil. *diadelpha (simplex et* 9*-fidum) æqualia, præter decimum brevitèr divisa :* anth. *oblongæ, breves, luteæ, erectæ.* Germ. *dispermum, subfalcato-oblongum, brevius stylo, sericeo-hirsutum :* stylus *albus, porrecto-assurgens, glaber, medio carnoso-tumidus vel fusiformi-incrassatus :* stig. *punctum obliquè depressum simplicissimum.* Leg. *compressum, viscoso-hirsutum, oblongum, mucronato-acuminatum.*

A West Indian species, introduced by Lord Petre about the year 1742. The plant from which the drawing has been taken, was raised from Jamaica seed, at Mr. Herbert's,

Spofforth; where it grows in the bark-bed of the stove, and flowers principally in the winter-season.

A twining shrub; *stems* woody, ash-coloured, about the thickness of a pen and smooth; all the rest of the plant covered with a viscous fur: *branches* green, shaggily villous, round. *Leaves* wide apart, alternate, scarcely exceeding two inches, of a lively green, thinly haired, each hair standing on a small glandular base, spotted underneath by a resinous efflorescence; *leaflets* roundishly rhomboidal, angularly and longishly acuminated with a blunt tip, branchingly nerved, reticulately veined, the terminal one about an inch long, lateral ones nearly twice smaller, inequilateral, very shortly petioled: *common petiole* longer than the terminal leaflet, stiffish, roughly villous, channelled above, jointed at the base and with all its leaflets: *stipules* 2, opposite, ovately lanceolate, short, green, uprightly patent, glandularly haired on the outside and streaked; *partial ones*, none. *Racemes* axillary, solitary, generally undivided, longer than the leaves, upright, from several to many(4-20-)flowered, 3-5 inches long; *peduncle* slender, villous, flexuose; *flowers* about half an inch long, deep yellow, very shortly pedicled; *pedicles* furnished at the base with a small ovate pointed herbaceous pubescent caducous *bracte*. *Calyx* 4-parted, pale-green, glandularly pubescent, twice shorter than the corolla, bilabiate, slightly compressed; *upper lip* shortest, ovately tapered deeply convex at the back, bifid at the tip, the lobules acute; *lower lip* straight, trifid with lanceolately subulate segments, the middle one of which is twice as long as the side ones. *Petals* of the *corolla* equal in length: *vexillum* streaked, reflex, obcordately round, villous on the outside and marked with incomplete purple streaks, furred at the base of the front of the blade with a green semicircular fleshy ridge, and convolutely eared on each side: *ungues* of the length of the calyx, convex: *wings* oblong, doubly unguiculated, 3 times as narrow as the vexillum, enclosing the keel, tawnyish, obtuse: *keel* pointing straight forwards, slightly falcate, veined, pale, somewhat ventricose, very obtuse, each petal stained with purple at the top. *Filaments* equal: *anthers* oblong, short, yellow, upright. *Germen* two-seeded, oblong, slightly falcate, shorter than the style, furred: *style* white, smooth, swollen in the middle: *stigma* a slantingly depressed simple point.



IPOMŒA cærulea.

Roxburgh's Ipomœa.

PENTANDRIA *MONOGYNIA.*

Nat. ord. CONVOLVULI. *Jussieu gen.* 132. *Div.* Stylus unicus.
CONVOLVULACEÆ. *Brown prod.* 481. *Sect. I.* Germen nullum.
IPOMŒA. Suprà vol. 1. *fol.* 9.

I. *cærulea*, annua, volubilis, pilosa; foliis cordatis, trilobis, villosis; pedunculis 2-3-floris, margine corollæ subintegrâ; stigmatibus 3-lobis; capsulis trilocularibus. *Roxburgh corom. ined. cum tab. pict.*

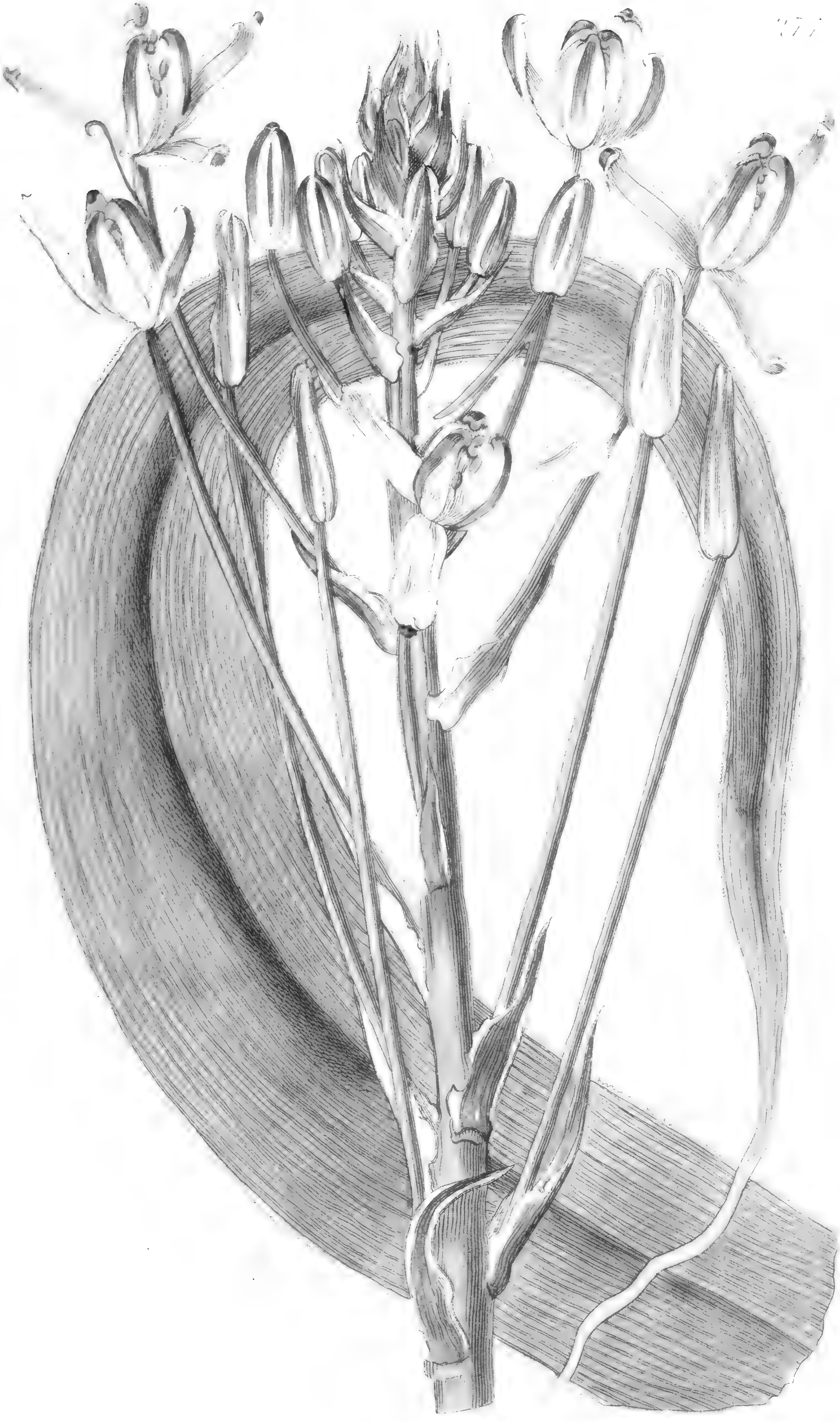
Orgyalis et ultrà, caule *crassitudine pennæ corvinæ, terete, piloso.* Folia *alterna, distantia, lato-cordata, triloba, pilosa, bi-quadriuncialia, lobis acutis intermedio majore longiùs acuminato.* Pedunculi *axillares, solitarii, longitudine fermè petiolorum, 2-3-flori.* Bracteæ *lineares.* Calyx *hirsutiùs pilosus, 3-plo v. ultra brevior corollâ, foliolis erectis, patulis, lanceolatis suprà subulatìm elongatis, isometris, interioribus duobus angustioribus.* Flores *magni, pallidè at vividè cærulescentes.* Cor. *subinfundibuliformis;* tubus *æqualis calyci, plus quàm duplo brevior fauce albâ;* limbus *subrotato-patens 2-plo brevior fauce cum tubo simul sumtâ, laciniis rotundatis mucronato-emarginatis.* Stam. *albicantia, æqualia fauci, inæqualia,* filamentis *infernè pilosis;* antheris *ochroleucis.* Stigma *granulato-capitatum.* Capsulæ *loculis dispermis.*

The present plant will be seen at once to be very closely allied to the CONVOLVULUS *Nil* of Linnæus, excellently figured in the 188th plate of Curtis's Botanical Magazine. The principal mark which appears to distinguish it, is that here the segments of the limb of the corolla are circular and very shallow, while in *Nil* they are deep and tapered into a point; the colour is likewise much paler in our plant and the foliage more deeply divided. Slight as these differences may appear, they have been found by Dr. Roxburgh, after a continued cultivation of the two in the Botanic Garden at Calcutta, to be constant, and one plant has never been perceived to make the least advance towards the other by any variation in these respects; so that we have not hesitated to keep the two distinct, after the example of Dr. Roxburgh.

Native of the East Indies, where however it is said to be a rare plant, growing principally in hedges and on old walls. The seed is sold by the native apothecaries at Calcutta, under the name of *Kalladenha*, and used medicinally. With us it is treated as a tender annual, and blossoms late in the

summer. The flowers are among the handsomest of the genus. We are not aware that the species has been ever introduced into this country, before it was lately sent from Madras by Mrs. Clarke to Messrs. Whitley and Co. of the Fulham nursery, where it was raised last summer. The seed had been procured from the Botanic Garden at Calcutta.

The whole plant, except the corolla, furred. *Stem* round, from six to twelve feet high, about as thick as a crow-quill at the base. *Leaves* alternate, distant, broadly cordate, three-lobed, 2-4 inches long, lobes pointed, middle one larger and farther tapered. *Peduncles* axillary, solitary, about the length of the petioles, 2-3-flowered. *Bractes* linear. *Calyx* more roughly furred than any other part of the plant, 3 times shorter than the corolla or more, *leaflets* upright, lanceolate with a long narrow subulate point, of one length, two inner ones narrower than the rest. *Flowers* large, of a bright pale blue colour. *Corolla* nearly funnelform; *tube* equal to the calyx, more than twice shorter than the *faux*, which is white; *limb* subrotately expanded, twice shorter than the tube reckoned together with the faux, segments rounded mucronately notched or emarginate. *Stamens* whitish, even with the faux, of unequal lengths; *filaments* furred below; *anthers* cream-coloured. *Stigma* a granulated head, slightly and obscurely three-lobed. Cells of the *capsule* two-seeded.



ALBUCA fastigiata.

Level-topped Albuca.

HEXANDRIA *MONOGYNIA.*

Nat. ord. ASPHODELI. *Jussieu gen.* 51. *Div. IV.* Flores spicati. Radix bulbosa. Corolla sexpartita, basi staminifera.
ASPHODELEÆ. *Brown prod.* 274.

ALBUCA. Cor. sexpartita, laciniis 3 interioribus sæpè erecto-conniventibus, rariùs omnibus stellato-patentibus, apice semper fornicatis. *Stylus* triqueter, crassus v. robustus. *Stigma* hirtum. *Sem.* plana, alata, nigra.

Differt ORNITHOGALO *laciniis corollæ alternis apice fornicato-incurvis atque incrassatis; stylo triquetro quasi ex tribus coadunatis; stigmate glanduloso-pubescente;* ANTHERICO *ob radicem solido-bulbosam.* Nob. in Curt. Magaz. foll. 871 et 1046.

Div. Staminibus omnibus fertilibus.

A. *fastigiata*, petalis interioribus apice fornicatis, foliis glabris, pedunculis longissimis. *Dryander Act. holm.* 1784. 296.

Albuca fastigiata. *Thunb. prod.* 65. *Hort. Kew.* 1. 436. *ed.* 2. 2. 250. *Willd. sp. pl.* 2. 101. *Andrews's reposit.* 450. *Redouté liliac.* 474.

Fol. *linearia, primùm canaliculata, dein planiuscula, sesquipedalia, unciam lata.* Scapus *foliis dimidio brevior crassitie pennæ anserinæ.* Racemus *fastigiatus longitudine scapi.* Pedunculi *sub anthesi patentes, post florescentiam erecti tri- v. quadriunciales.* Bracteæ *membranaceæ hyalinæ dorso rufescentes semiunciales.* Flores *albi.* Petala *exteriora lineari-oblonga apice incrassata unciá breviora, interiora ovali-oblonga apice fornicata, exterioribus paulò breviora.* Filamenta *omnia fertilia, tria alterna paulò breviora, extùs convexa, intùs canuliculata;* stylus *prismaticus sulcatus germine paulò longior, staminibus paulò altior, tectus ramentis brevissimis præcipuè versùs apicem, viridis sulcis luteis, terminatus* stigmate *ex angulis styli apice rotundatis.* Dryand. l. c.

A genus confining with ORNITHOGALUM, from which it differs in technical character by having the ends of the alternate segments of the corolla arched inwards, a prismatically 3-sided style, and a glandularly pubescent stigma; differences that are combined with others in the general habit, the bulb being nearly solid, and formed of much thicker fleshier laminæ than in that of ORNITHOGALUM, and the foliage is less succulent than there. At other points it approaches DRIMIA and ANTHERICUM. All the recorded species belong to the Cape of Good Hope, except perhaps that which has obtained the name of *abyssinica*, the true country of which seems doubtful. The present was introduced by Mr.

Masson in 1774. The drawing was taken from a plant which flowered in the greenhouse at the nursery of Messrs. Whitley, Brames, and Milne, at Fulham.

The following is the version of Mr. Dryander's description of the species. " *Leaves* linear, first channelled, afterwards " nearly flat, a foot and half long, an inch broad. *Scape* " half the length of the leaves, about as thick as a goose- " quill. *Raceme* level-topped, as long as the scape. *Pe-* " *duncles* spreading while the plant is in flower, afterwards " upright, from three to four inches long. *Bractes* mem- " branous, transparent, reddish at the back, about half an " inch long. *Flowers* white. *Outer petals* linearly oblong, " thickened at the top, less than an inch in length, *inner* " *ones* ovally oblong, arched at the top, a little shorter than " the outer ones. *Filaments* all fertile, three alternate ones " rather the shortest, convex on the outside, channelled on " the inside. *Style* prism-shaped, furrowed, a little longer " than the germen, a little higher than the stamens, co- " vered over with very small shreds, especially near the top, " green with yellow furrows, terminated by a *stigma* formed " of the angles of the style rounded at the top."

NOTE.

In the 20th line of the second leaf of the 268th article of this work, for " bractes" read " branches."

At the 3d line of the english text of the first page of the 260th article of this work, instead of; " Only one species has a station in Europe, and that " at an extreme part, viz. the shores of Naples." read; " The nearest sta- " tion taken by any of the species to this part of Europe, is on the coast of " the Kingdom of Naples."

SEMPERVIVUM glutinosum.

Clammy Houseleek.

DODECANDRIA *DODECAGYNIA.*

Nat. ord. SEMPERVIVÆ. *Jussieu gen.* 307.
SEMPERVIVUM. Suprà vol. 2. fol. 99.

S. *glutinosum,* caule frutescente, foliis cuneiformibus viscidis ciliatis, ciliis cartilagineis appressis. *Hort. Kew.* 2. 147.
Sempervivum glutinosum. *Willd. sp. pl.* 2. 931. *Hort. Kew. ed.* 2. 3. 172. *Jacq. hort. schœnb.* 4. 32. *t.* 464. *Curtis's magaz.* 1963. *Poiret suppl. encyc. de Lamarck.* 3. 176.

Caudex *fruticosus, pollicem crassus, brevis, teres, erectus, glaber, radicans, undìque emittens ramos ascendentes ceu totidem caules, à 3 ad 4 pedes altos, crassos, glutinosos, foliosos, debiles, supernè in paniculam abeuntes amplam laxamque ex pedunculis subdivisis et patentissimis.* Fol. *sparsa, cuneiformia, obtusa cum parvo acumine, venis nervisque destituta, crassa, carnosa, virentia, ad oras cartilagineo-ciliata ciliis subappressis.* Cal. *glutinosus, circitèr decemdentatus, viridis.* Pet. 8-10, *lanceolata, patentissima, flava.* Germina *totidem quot petala.* Stam. *petalis duplo plura.* Jacq. loc. cit.

Native of the Island of Madeira, where it was observed by Mr. Masson, the king's late botanical collector, and introduced in 1777. Its blossom makes a lively appearance in the greenhouse, where it continues in beauty for two or three months together. The foliage is suffused with a transparent viscous confluent excretion, and looks as if newly varnished. Small insects are ensnared in this limy surface. The species was first represented by a figure in the Hortus Schœnbrunnensis of Jacquin, one of the most splendid works in this department of Natural History.

Stem shrubby, nearly an inch in diameter, smooth, short, putting out a greater or less number of weak thickly limed flower-stalks, from 2 to 4 feet in length, dividing upwards into alternate wideset leafy subdivided panicles, with loosely flowered spikelets. *Leaves* scattered, spreading, approaching each other in the form of an expanded rose at the top of the stem, cuneately oblong, bright, limy, 3 to 4 inches long, thick, fleshy, cartilaginously fringed at the edge with the fringe generally close-pressed, rounded at the top with a small point, gradually diminishing to small fleshy concave *bractes* as they ascend on the flower-stalk: *pedicles* not so long as the flower is wide. *Calyx* 9-10-cleft, green, limy.

Petals equal in number to the calycine segments and alternating with them, deep yellow, lanceolate, stellately expanded. *Stamens* doubling the number of the petals. *Germens* as many as petals, each with a small notched scalelike membranous gland at the base, the nectary of Linnæus.

NOTE.

In the English text of the article ACROSTICHUM *alcicorne* (262, 263) in the third volume of this publication, we have explained erroneously the term *Gyratæ*, used by Dr. Swartz in his celebrated Synopsis as the denomination of one of his divisions of the Order *Filices*, by referring its meaning to the involution of the nascent fronds; while in truth it is intended by that ingenious author to designate a division of this natural family, the species of which are furnished with capsules that are encircled by an articulated ring or sphincter, by the curious elastic nitency of which these are enabled, when ripe, to evacuate and project their fine dustlike seeds. We are obliged to Mr. Brown for pointing out to us our blunder.

IPOMŒA Turpethum.

Square-stemmed East Indian Ipomœa.

PENTANDRIA *MONOGYNIA.*

Nat. ord. CONVOLVULI. *Jussieu gen.* 132. *Div. I.* Stylus unicus.
CONVOLVULACEÆ. *Brown prod.* 481. *Sect. I.* Germ. 1.
IPOMŒA. Suprà vol. 1. *fol.* 9.

I. *Turpethum*, foliis cordatis angulatis, caule membranaceo-quadrangulari, pedunculis multifloris. *Linn. sp. pl.* 1. 221; *(sub* CONVOLVULO).
Convolvulus Turpethum. *Mill. dict. ed.* 8. *n.* 31. *Hort. Kew.* 1. 211. *ed.* 2. 1. 332. *Blackw. t.* 379. *Willd. sp. pl.* 1. 859.
Convolvulus indicus alatus maximus, foliis Ibisco nonnihil similibus angulosis. *Herm. lugdb.* 177. *tabb.* 178. 179.
Turpetum repens, foliis althææ vel indicum. *Bauh. pin.* 149.
(β) Planta Novæ Hollandiæ caule angustiùs alato.
Ipomœa *Turpethum*, pubescens, foliis cordatis acutis integris: inferioribus nunc angulatis, pedunculis inferioribus multifloris; superioribus 1-2-floris; bracteis membranaceis ovatis caducis, calycibus sericeis, capsulis didymis tenuissimis inclusis, seminibus glabris, caule angulato. *Brown prod.* 1. 485.

OBS. Planta (indica) Herbarii Hermanni, quæ hujus speciei unica auctoritas, à nostrâ (Novâ-Hollandicâ) paulò diversa caule latiùs alato. Br. l. c.

Perennis. Herba tota pubescens. Folia *molli-villosa, mucronata*, superiora *sæpiùs oblongo-cordata, angulata, utroque latere infernè plùs minùs sinuato-repanda*, inferiora *ovato v. lato-cordata, subhorizontali-nervosa, 2-3-plo longiora* petiolo. Pedunculi *pluriflori, hirsutiùs villosi, breviores folio.* Cal. *amplus, membranosus, sericeo-lanuginosus, pallidus v. subalbicans, punctis conspersus*, foliolis *ellipticis, acutis, extimis duobus majoribus, ½ unciæ vel circitèr altis.* Bracteæ *magnæ, colore et substantiâ foliolorum calycis, caducæ, basi pedunculorum vel sub flore positæ.* Cor. *alba, subinfundibuliformis, laciniis rotundatis.* Stigma *capitatum.*

Though the species is known to have been cultivated in this country, at the Chelsea Garden, by Miller, as far back as 1752, yet it proves still to be a very rare plant in our collections, where, as we are told, it had never blossomed. Mr. Herbert, to whom this publication owes many rare and curious plants, and who has paid peculiar attention to the study and collection of the species of the present genus, raised the plant in his hothouse at Spofforth, and succeeded in bringing it to flower. The specimen from which the drawing has been made, was sent by his directions in February last; but the large bractes which belong to it, and are naturally destined to fall as soon as the flower is

completely expanded, had dropped off in the way to town, and could not be represented in the present figure.

The species is native of the East Indies. There is likewise a specimen of it in the Banksian Herbarium, from Otaheite. Mr. Brown having noticed a slight difference in the New Holland plant he has ranked under the present title, we have subjoined it in the synomyny, as the variety β. until experience, or comparison between the living plants, has proved their identity.

A perennial plant, except at the corolla loosely furred with a soft whitish pubescence. *Leaves* soft, green, mucronate, *upper ones* oftenest oblongly cordate, angular, on each side of the lower part repandly indented, *lower ones* ovately or broadly cordate, with horizontally branched nerves, two or three times longer than the *petiole*. *Peduncles* several-flowered, more roughly villous than any other part of the plant, shorter than the leaf. *Calyx* large, membranous, sericeously downy, whitish, sprinkled over in our specimen with dots; *leaflets* elliptic, pointed, two outer ones largest, about three fourths of an inch, or thereabout, high. *Bractes* large, of the same colour and substance as the leaflets of the calyx, caducous, placed below the flowers or at the base of the peduncles. *Corolla* white; *segments* rounded. *Stigma* capitate.

Hermann speaks of the roots as woody, and as being of the thickness of the thumb, and says that they descend to the depth of three or four yards into the ground. He found the plant abundantly in wet shady places, at the sides of ditches, behind garden hedges and such-like places at some distance from the sea, both in the Island of Ceylon and on the coast of Malabar; and describes the flowers as of the size of the common Bind-weed.

Pub.d by Ridgway & Sons May 1 1818.

W. J. White sc.

HOVEA Celsi.

Cels's Hovea.

DIADELPHIA *DECANDRIA.*

Nat. ord. LEGUMINOSÆ. *Jussieu gen.* 345. *Div. V.* Cor. irregularis, papilionacea. Legumen uniloculare bivalve.

HOVEA. Cal. bilabiatus: labio superiore semibifido retuso. *Stam.* omnia connexa. *Carina* obtusa. *Legumen* sessile subrotundum ventricosum dispermum. *Semina* strophiolata. *Brown in Hort. Kew. ed.* 2. 4. 275.

H. *Celsi*, ramulis teretibus, foliis lanceolatis subrhombeis, apice obtusis, mucronatis; pedunculis axillaribus multifloris; calyce bracteisque pilosiusculis. *Bonpland nav. & malmais.* 125. *tab.* 51.

Frutex *altitudinem* 4-6-*pedalem in hortis acquirens; caule crassitudine digiti minoris, primò circa medium in ramos se dividente, cortice cinereo-fusco subrimoso:* rami *plurimi, pluriès divisi, supernè flexi, plùs minùs villosi.* Fol. *coriaceo-rigentia, sparsa, laxa, erecto-patentia, rhombeo-v. ventricoso-lanceolata,* 1-2-*uncialia latitudine* 8-10-*lineari, reticulato-venosa, utrinque obtusata, apiculo mutico terminata, subtùs varicoso-nervosa villosaque villis in junioribus (præsertìm ad costam mediam) fuscescentibus;* petiolus *teres, villosus, pluriès brevior laminâ.* Pedunculi *numerosi, in ramis racemosè digesti, axillares, solitarii, laxè pauci-pluri* (2-4?)-*flori, erecti, villosi, teretes, fusci, pluriès longiores petiolis, breviores foliis:* bracteolæ *binæ appressæ oppositolaterales ad basin cujusque floris.* Flores *violaceo-cyanei, venosi, inodori, longitudine vix semiunciales, subnutantes:* cal. $\frac{1}{3}$ *brevior vexillo, ad* $\frac{1}{3}$ *circitèr usque* 4-*fidus, fuscescens, subsericeo-villosus, bilabiatus;* labio superiore *longiore latissimè cuneato v. turbinato, margine summo rotundato emarginaturâ mediâ brevi, dorso obtusè carinato;* labio inferiore *tridentato æquali recto acuto.* Cor. vex. *erectum, patens, glabrum, obcordato-rotundum, valdè majus alis et carinâ, summo margine inciso-emarginatum, maculâ ampliusculâ subdidymâ albâ ad basin, dorso carinato-plicatum;* ungue *brevi:* alæ *spathulato-oblongæ, purpureo-violaceæ, carinam minorem complectentes et unà cum eâ assurgentes, areolam albam vexilli cui accumbunt altitudine æquantes, apice rotundatæ:* carina *obtusa, compressa, è petalis* 2 *partìm cohærentibus, alarum concoloribus, brevè unguiculatis.* Stam. *monadelpha cum fissurâ dorsali (v. interdum diadelpha?) cæterum breviùs divisa, æqualia:* anth. *breves, erectæ, lutescentes,* polline *grumoso.* Germ. *pedicellatum, ovale, breve, compressum, diaphanum, albicans, glabrum, dispermum;* stylus *pluriès longior illo subulato-filiformis, glaber, infrà compressus:* stigma *capitellum minutum puberulum.*

HOVEA, as far as the genus is yet known, is confined to New Holland. Four species have been recorded, two in the late edition of the Hortus Kewensis, one in Curtis's Magazine, and the present in the work we have quoted. The last was introduced into France by the naturalists of the celebrated French expedition to New Holland, under

the command of Captain Baudin. It was unknown in this country until imported last year, from the nursery of Monsieur Cels at Paris, by Mr. Allen, nurseryman, in the King's Road. The parent plant is said to be six feet high, and much branched; those we have seen are yet small, and have not divided into branches. The bloom is abundant, of a fine deep violet blue, rendering it a very desirable shrub to the greenhouse and conservatory, where it flowers about March.

An upright branching shrub; *stem* about the thickness of the little finger, beginning to divide into branches about the middle. *Leaves* coriaceously stiffened, scattered, widishly set, uprightly spreading, rhomboidally or ventricosely lanceolate, 1-2 inches long, 8-10 lines broad with finely netted veins, blunted at each end, with a small terminal point, varicosely nerved underneath and villous; *petiole* several times shorter than the blade, round, villous, brownish. *Peduncles* numerous, disposed on the branches in the form of a raceme, axillary, solitary, loosely several-(2-4?) flowered, upright, brown, villous, round, several times longer than the petiole, shorter than the leaf: two small opposite close-pressed *side-bractes* at the base of each flower. *Flowers* scentless, veined, scarcely half an inch deep, somewhat nodding: *calyx* $\frac{1}{3}$ shorter than the vexillum, 4-cleft to about one third of its length, brownish, subsericeously villous, 2-lipped; *upper lip* the longest, very broadly cuneate or turbinate with a broad rounded margin slightly notched at the top, by the folding inwards of the sides bluntly keeled at the back; *lower lip* three-pronged, equal, straight, sharp-pointed. *Vexillum* upright, spreading, smooth, obcordately round, much larger than the alæ and keel, with a deep incision at the upper margin and a large double white spot at the base; *unguis* short: *wings* spatulately oblong, enclosing the keel which is smaller, about the length of the white mark at the base of the vexillum; *keel* obtuse, compressed, of the same colour as the wings. *Stamens* monadelphous (according to Mr. Edwards sometimes diadelphous), with a dorsal fissure, equal: *anthers* small, yellow; *pollen* grumous. *Germen* pedicled, short, compressed, 2-seeded, smooth, whitish; *style* several times longer, smooth: *stigma* a small pubescent head. *Seeds* strophiolated, having a fungous accretion at the ventral region.

LEONOTIS nepetifolia.

Catmint-leaved Leonotis.

DIDYNAMIA *GYMNOSPERMIA.*

Nat. ord. LABIATÆ. *Jussieu gen.* 110. *Div. III.* **Stam. 4 fertilia.** Cor. bilabiata. Cal. 5-fidus.

LABIATÆ. *Brown prod.* 499. *Sect. II.* **Stam. 4 fertilia,** antheris omnium v. duorum completis. *A.* Cal. **regularis 5-fidus v. 5-10-dentatus.**

LEONOTIS. Cal. 10-striatus, 6-10-dentatus. *Cor. galea* **elongata,** barbata, integra; *labium inferius* nanum, 3-fidum; laciniis subæqualibus. *Antheræ* lobis divaricatis. *Stigma* labio superiore breviore. *Brown in Hort. Kew. ed.* 2. 3. 409.

L. *nepetifolia*, foliis cordatis acutis inciso-crenatis, calycibus **aristatis octo** dentatis: dente supremo maximo, caule herbaceo. *Brown in Hort. Kew. ed.* 2. 3. 409.

Phlomis nepetifolia. *Linn. sp. pl.* 2. 820. *Hort. Kew.* 2. 309. *Willd. sp. pl.* 3. 126.

Cardiaca americana annua, nepetæ folio, floribus brevibus phœniceis villosis. *Herm. lugdb.* 115. *tab.* 117.

(Annua.) Caulis *simplex, erectus, quadrangulus, obtusus (lanugine brevissimâ densâ albidâ pruinatus profundè et obtusè) quadrisulcatus,* **sexpedalis.** Fol. *cordata, obtusiusculè et profundè serrata, subtomentosa, viridia.* **Petioli** *longitudine foliorum.* Verticilli aliquot *versùs apices globosi, multiflori.* Cal. *subpilosus,* (10-*nervis cucullato-*) *cylindricus limbo spinoso, acutissimo: dente superiore duplo majore; præterea dentes* 4-6-(9), *parvi.* Cor. *(subuncialis) villosa (aurantiaco-coccinea, galeâ extùs hirsutiùs barbatâ holosericeâ) facie et colore* LEONOTIDIS Leonuri, *sed triplo minor:* **labio superiore** *teretiusculo, longo, emarginato;* **labio inferiore** *brevi, trifido, lævi, (citiùs emarcescente).* Involucrum *(polyphyllum pubescens florum verticillo absconditum lineari-) subulatum, reflexum, (apicibus pungentibus).* Stamina *per paria cohærentia.* Stig. 2, *filiformia, superiore dimidio breviore.* Lin. loc. cit.

LEONOTIS is one of three genera into which the PHLOMIS of Linnæus has been divided by Messrs. Persoon and Brown, in their respective works. It is distinguished from the two others, principally by the very short nearly evenly trifid quickly withering nether lip of the corolla; and from LEONURUS, by having the upper lobe of the stigma greatly shorter than the under.

We owe the specimen from which the drawing has been made to the kindness of Sir. Abraham Hume, by whom the plant was raised at Wormleybury, from seeds brought home by an officer who survived the melancholy enterprise of

exploring the river Congo. There is however no sample of the species in the Herbarium of Dr. Smith, the botanist of that expedition, nor any seeds of it among the collection brought home for the Kew Gardens; nor have we indeed any direct notice where the seed that produced the plant was collected, nor if indigenous of the place where it was found. We have been unable to detect in it any difference whatever from the East Indian plant, under the name of which it is now given, except that the upper part of the calyx has rather a longer fur in the indigenous samples than in ours. In some samples of the species all the whorls of the inflorescence are separately subtended by a pair of opposite leaves below the involucre, in others only the lower whorls are so, in others none. Specimens having been formerly brought from Surinam, of which country however it seems to be ascertained that it is not an aboriginal plant, Hermann has been led to apply to it the epithet of "americana." It is an annual species. Requires to be kept constantly in the hothouse, where it grows to the height of from 4 to 6 feet. It bears a great resemblance to the fine Cape species (L. *Leonurus)* well known in our gardens by the name of "Lion's Tail;" but the foliage is here much broader, and the corolla three or four times smaller. Introduced from the East Indies by Sir Joseph Banks in 1778.

Stem simple, upright, quadrangular, obtusely cornered, furred with a close white extremely short down, like that on the skin of a Peach, with 4 deep broad furrows. *Leaves* cordate, obtusely and deeply serrated, subtomentose, green. *Petioles* the length of the leaves. *Whorls* distant, many-flowered, towards the top of the spike globular. *Calyx* slightly haired, 10-nerved, cucullately cylindrical, with a sharply toothed spiny border: the upper tooth being more than twice larger than the others, which are from 4 to 9, and small. *Corolla* villous, about an inch long, of a deep shining orange-scarlet, casque or upper lip projecting far beyond the nether lip, shaggily and brightly bearded on the outside, notched, *lower lip* quite smooth, sharp pointed. *Involucre* numerously leafletted, concealed by the flowers of the whorl, reflectent, pubescent, *leaflets* lanceolately linear, prickly pointed. *Anthers* two-lobed, lobes vertically divaricated.

Not having had an opportunity of seeing the plant while fresh, we have added but little to the sketch given by Linnæus.

HIBBERTIA dentata. α.

Toothed-leaved Hibbertia.

POLYANDRIA *TRIGYNIA.*

Nat. ord. MAGNOLIÆ. *Jussieu gen.* 280. *Div.* Genera Magnoliis affinia.

DILLENIACEÆ. *Decand. syst. nat.* 1. 395. *Tribus* 2da. Dilleneæ.

HIBBERTIA. Foliola calycina 5 persistentia. *Pet.* 5. *Stam.* indefinita, libera, inter se subæqualia; *anth.* ovales aut oblongæ terminales; *germ.* 1-15, sæpiùs 2-5; *styli* filiformes, divergentes aut incurvi; *capsulæ* membranaceæ dehiscentes, sæpiùs 1-2-spermæ; rariùs polyspermæ; *semª.* exarillata.

Suffrutices ramosi sæpiùs erecti, rariùs procumbentes aut volubiles; folia alterna, subcoriacea, integra aut dentata, brevissimè petiolata. Flores flavi terminales solitarii subsessiles aut pedunculati. Decand. loc. cit. 425.

Div. II. Germinibus 1-8 *glabris.*

H. *dentata*, foliis oblongis acuminatis glabris aristulato-serratis, floribus pedunculatis trigynis, caule volubili. *Decand. l. c.* 426.

Hibbertia dentata. *Brown ined.*

(β.) pedicellis glabris.

Caules *sarmentosi teretes glabri;* fol. *petiolata oblonga acuminata, serraturis exsertis arìstulatis distantibus hìnc indè dentata, coriacea, glabra, juniora subtùs vix ac ne vix pilosa;* pedunculi 1-*flori folio breviores hispidi deflexi;* bracteæ *lineari-subulatæ membranaceæ;* flores *paulò minores quam in* H. volubili; foliola calycina *in acumen aristatum desinentia extùs villosula;* pet. *obovata calyce paulò longiora;* stam. *calyce breviora;* germ. 3 *glabra;* styli *filiformes, divergentes acuti. Var.* β *non differt nisi foliis magìs serratis, pedicellis calycibusque glabris aut vix pilosis.* Dec. l. c. Pedunc. *solitarius, pilosus, primò terminalis, indè axillaris;* bracteæ *parvæ scabro-ciliatæ.* Cal. *rotatus, subduplo brevior corollâ, foliolis cordato-ellipticis mucronatis subinæqualibus.* Cor. *rosaceo-rotata, lutea, diametro subbiunciali,* petalis *oblongo-obcordatis.* Stam. *2plo breviora calyce:* anth. *continuo-terminales, compresso-ovales, recurvatæ, secundùm marginem dehiscentes.* Germª. *alba, ovata,* stylo *caudato-continuo æquante stamina, puncto stigmatoso simplici.* Folia *subovato-v. elongato-oblonga,* 2-3-*uncialia ciliata mucronata, dentata dentibus inæqualiter distantibus aliquibus mucronato-productis, subtus pilis brevibus antrorsum aduncis scabro-villòsa;* petiolus *villosus, pluriès brevior laminâ, subalatus, canaliculatus.*

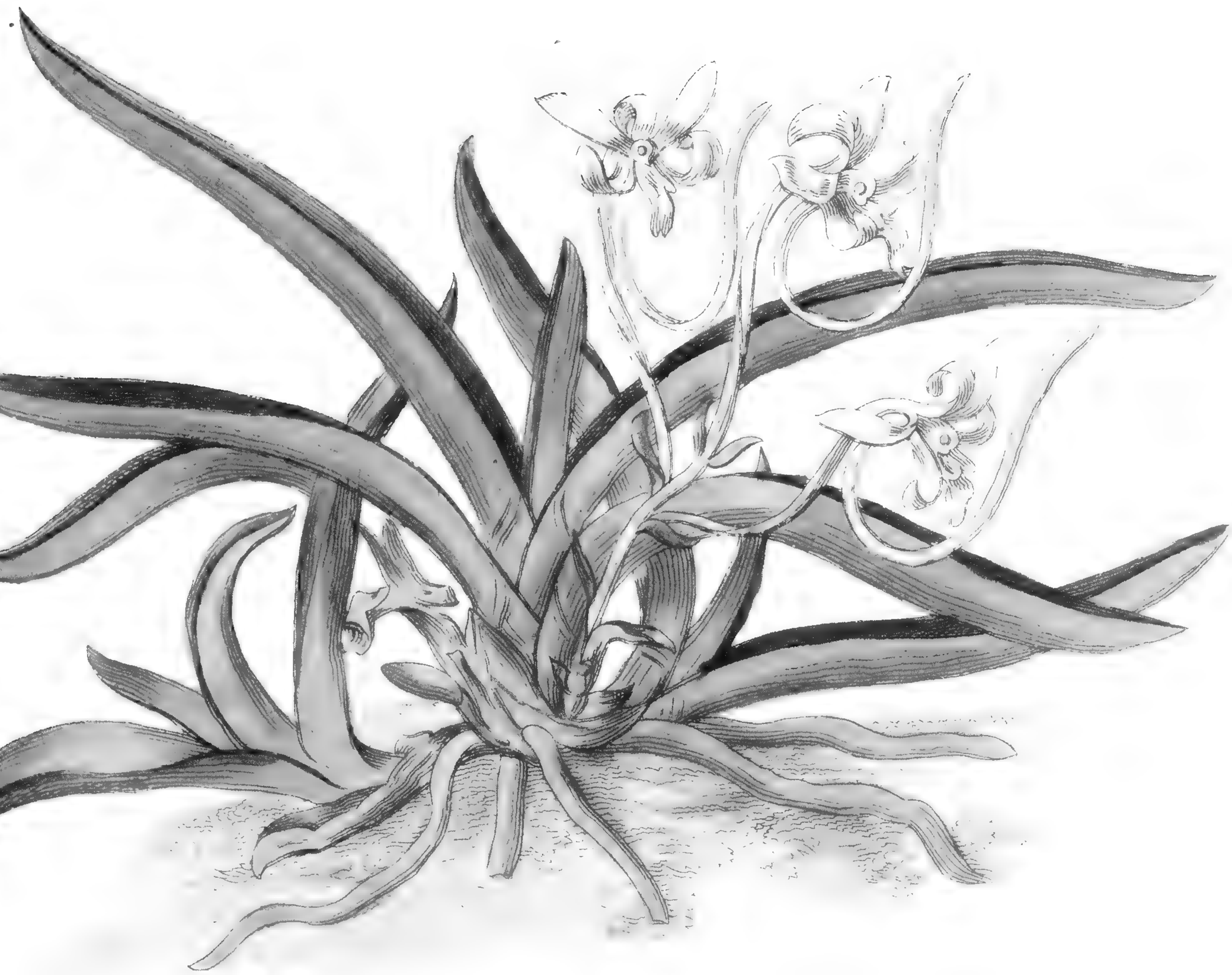
Of the *Dilleniaceæ*, the ordinal head under which we find the present genus in the volume by which the arduous enterprize of arranging and describing the members of the vegetable creation according to affinity has just been opened, we find no species was known in the time of Gasper Bauhin, probably not even in that of Tournefort; Linnæus was ac-

quainted with 3, Willdenow has recorded 21, and 96 have been now discovered. Of these, 51 belong to Australasia, 21 to the East Indies and neighbouring regions, 3 to the equatorial parts of Africa, 21 to the equatorial parts of America, but none are indigenous within the temperate latitudes of the northern hemisphere.

The complement of HIBBERTIA consists at present of 19 species, all natives of New Holland. The one before us has been introduced subsequently to the appearance of the last edition of the Hortus Kewensis; and has not been till now represented by any published figure. The drawing was made at the nursery of Messrs. Whitley and Co. at Fulham, where it is cultivated in the greenhouse, and flowers usually about March.

A suffrutescent plant, with a round sarmentose *stem*. *Leaves* petioled, subovately or elongatedly oblong, 2–3 inches in length, acuminate, mucronate, roughly ciliated, remotely indented, some of the teeth having an elongated mucroniform termination, shortly but roughly furred on the under side, the villi of the nap being crooked and set all one way, occasioning a burry feel when the hand is drawn against the grain. *Peduncle* at first terminal, axillary from the growth of the branch, one-flowered, solitary, hispid, shorter than the leaf; *bractes* small, ciliated, linearly subulate, membranous. *Calyx* rotately expanded, as short again as the corolla, persistent, *leaflets* cordately elliptical, mucronate, slightly unequal, furred on the outside, ciliate, as well as the peduncle and bractes of a reddish green. *Corolla* reminding us of that of a single-flowered yellow Rose, about two inches in diameter, *petals* oblongly obcordate. *Stamens* twice shorter than the calyx, yellow, numerous, slightly connected at the base: *anthers* continuously terminal, compressedly oval, recurved, discharging the pollen by a marginal fissure. *Germens* 3, white, smooth, ovate, surmounted by a caudately continuous *style* equalling the stamens, and terminated by a simple stigmatose point. We have seen no specimen much above a foot high, nor with more than one flower on a stem.

a Calyx and stamens. *b* The three pistils.



White sculp

Pub.d by J. Ridgway & Sons May 1.1818.

LIMODORUM falcatum.

Sickle-leaved Limodorum

GYNANDRIA *MONOGYNIA.*

Nat. ord. ORCHIDEÆ. *Jussieu gen.* 64.
ORCHIDEÆ. *Brown prod.* 309. *Div. IV. Anth.* terminalis, mobilis, decidua. *Mass. Poll.* demùm cereaceæ.

LIMODORUM. Cor. hexapetala, plerumque patens, rariùs resupinata: *pet.* 3 exteriora, 2 interiora sæpè minora: *labellum* (ex interioribus unum) basi concavum, posticè in calcar variæ figuræ et longitudinis prominens: *lamina* patula, indivisa s. lobata. *Genitalia* et *Capsula* ut in CYMBIDIO et EPIDENDRO, à quibus differt labio cornuto. Ab ORCHIDE corollâ non ringente et structurâ columnæ genitalium. *Swartz in Schrader's journ.* 1799. 2. 228. *Id. in ejusdem neues journ.* 1. 84.

L. *falcatum*, foliis subradicalibus ensiformi-canaliculatis falcatis, scapis paucifloris, cornu filiformi longissimo. *Swartz in nov. act. ups.* 6. 79.
Limodorum falcatum. *Thunb. ic. pl. jap. t.* 6. *Swartz in Schrader's journ.* 1799. 2. 231. *Id. in ejusd. neues journ.* 1. 85. *Willd. sp. pl.* 4. 125.
Orchis falcata. *Thunb. jap.* 26.

Herba perennis, rigida, stolonifera, subtriuncialis, terrestris. Radix *fibris horizontalibus crassis subsimplicibusque.* Fol. *radicalia, subquina, falcato-disticha, equitantia, crassiuscula, angustiùs lorata, acuminata, arctiùs complicato-canaliculata, opaco-viridia:* stipulæ *plures radicales arido-membranaceæ lanceolato-vaginosæ.* Scapus *radicalis, brevior foliis, rigidus, viridis, angulosus, flexuosus, subquadriflorus.* Flores *resupinati, erecto-spicati alternè approximati, corymbum simulantes, albi, sesquiunciales v. circitèr, fulvido-emarcesentes; singuli basi* bracteâ *arido-membranaceâ fuscâ triplo breviore lanceolato-conduplicatâ trinervi stipati.* Germ. *unciam cum ½ alterius longum, chloroleucum, gracile, subclavatum, subsigmoideo-flexuosum, anguloso-striatum, tortum.* Cor. *unicolor, subnutans, radiato-patens, ½ v. circitèr unciæ transversa, subæqualis:* pet. 5 *similia, distantia, summum medium versûs subascendentia, lineari-oblonga, acuminata, angusta, plana;* 3 exteriora *revoluta;* 2 lateralia inferiora *infernè labelli lateribus à facie interiore applicita, indèque revoluto-divergentia:* labellum *recurvo-porrectum, oblongatum, difforme, non longius reliquis petalis vixve latius,* ungue *cuneato-oblongo, convoluto-concavo, libero, lobo dentiformi acuto suprà ad utrumque latus, cum plicâ transversâ ubi abit in laminam;* lamina *vix longior ungue, angustior, oblonga, subattenuata, truncato-retusa, subdeflexa:* calcar *liberum, filiforme, æquale vel longius germini, gyro antrorsum ascendens modo ut finis ejus æquet vel superemineat reliquam corollam, apice lutescens, obtusulum.* Columna *alba, oblonga, subtriplo brevior corollâ, libera, tota anticè in longum cavata cavitate incumbente sulco parallelo unguis labelli.* Anthera *hemisphærica, bilocularis, decidua;* massæ pollinis 2 *luteæ, pruinoso-opacatæ, solidæ, cartilagineo-duræ depressiùs hemisphæricæ v. subpatelliformes, horizontales, utrinque pedicello membranaceo subsagittatìmque dilatato apici columnæ anticè agglutinato à marginibus suis interioribus in situ horizontali collaterali-annexæ, subtùs planiusculæ ibìque intra periphæriam laterum foramine cæco obliquo compresso triangulari ad centrum ducente pro dimidio suo circitèr pertusæ.* Stigma *anticum, album, subbicolle, sursum spectans, basi columnæ intra cavitatem ad pedem unguis labelli positum.*

If we regard the present plant as of the type that is to determine the genus LIMODORUM, it is clear that in conformity with the standard now used in restricting the degrees of generic affinity, many species included by Dr. Swartz as congeners of the group, must fall to be considered as too widely anomalous to remain together within the same generic pale. Accordingly we find that several of the species have been already removed, and formed into other genera. Among these, the fine one by which the genus had been till of late the most familiarly exemplified in our gardens, viz. the LIMODORUM (now BLETIA) *Tankervilliæ*. We are not aware that any species, which would be now deemed a suitable generic associate for the subject of this article, has been ever introduced into our European collections before the present specimen, which was received about four years ago through Dr. Roxburgh, from the East Indies, by Sir Abraham Hume, and cultivated in the hothouse at Wormleybury, a source from which many rare and curious vegetables have been liberally distributed among the gardens of this country. The specimen which afforded our drawing, was sent to Mr. Edwards from thence, by the direction of the owner, in March last, and had bloomed at the same period the three preceding years. The species was first observed by Thunberg in Japan, near the port of Nagasaki, growing on hills among the bushes; and is probably likewise a native of China. At some points it comes near to AERIDES, of which a species has been given in a foregoing number of this publication.

A stiff-leaved herbaceous stoloniferous perennial, about three inches high, growing on the ground, not on trees as many of its kindred do. *Root* with thick horizontal undivided fibres. *Leaves* radical, about five, falcately distich, equitant, thickish, narrowly lorate, acuminate, folded into a deep closish channel, of an opaque green colour: *stipules* radical, several, membranous, withered, lanceolate, sheathing. *Scape* radical, shorter than the leaves, stiff, green, angular, flexuose, about four-flowered. *Flowers* reversed, uprightly spiked, but being set at small distances from each other, owing to their length, they afford rather the appearance of a corymb than a spike, white, but as they fade turning to a tawny yellow colour, about an inch and a half long, each with a sphacelately membranous brown three-nerved folding lanceolate

thrice shorter *bracte* at the base. *Germen* more than an inch long, greenish white, slender, slightly clavate, shallowly bent somewhat in the form of an S, angularly fluted, twisted. *Corolla* of one colour, very slightly nutant, radiately spread, about $\frac{3}{4}$ inch across, nearly equal: 5 *petals* of the same shape, standing asunder, ascending slightly towards the upper middle one, linearly oblong, acuminate, narrow, flat; 3 *exterior ones* revolute; 2 *lower lateral ones* with the lower part applied broadways to the sides of the label, diverging upwards revolutely: *label* pointing forwards and recurved, oblong, biformed, not longer and scarcely broader than the other five petals; *unguis* detached, cuneately oblong, convolutely concave, with a pointed toothlike lobe on each side at the top, marked where it joins the lamina with a transverse plait; *lamina* or *blade* narrower, scarcely longer than the unguis, oblong, slightly tapered, truncately retuse, subdeflectent; *spur* detached, filiform, equal to or rather longer than the germen, turned up frontways with a circular bend, so that the point becomes even with or higher than the rest of the corolla, yellow and bluntish at the end. *Column* white, oblong, about thrice shorter than the corolla, detached, hollowed its whole length in front, the cavity incumbent upon the parallel one of the unguis of the label. *Anther* hemispherical, terminal, moveable, deciduous, bilocular; *pollen-masses* two, yellow, opaquely frosted, solid, of a cartilaginous consistence, depressedly hemispherical, something of the shape of the knee-pan in miniature, horizontal, fixed side by side at their inner margins in a horizontal direction to a membranous subsagittately dilated pedicle, which adheres to the front edge of the apex of the column, flattish underneath, where within the edge of the periphery of their outer sides they are pierced for about half their diameter obliquely with a compressed triangular puncture which points towards their centre. *Stigma* placed in front at the base and within the hollow of the column, looking upwards, white, resembling two small studs or bosses, opposite the foot of the label.

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a The two pollen-masses with their pedicle, removed from the receptacle of the anther, in the state they appear when they have left the summit of the column to apply themselves to the stigma at the foot.

BEGONIA humilis.

Small-flowered Begonia.

MONŒCIA *POLYANDRIA.*

Nat. ord. Plantæ incertæ sedis. Polypetalæ germine infero. *Jussieu gen.* 436.

Begoniaceæ. *Bonpland nav. & malm.* 151.

BEGONIA. Masculi flores. *Cal.* 0. *Cor. pet.* 4 (in *octopetala* 6-9: plerùmque subrotunda (in *ferruginea*, omnia subæqualia oblonga). *Stam. fil.* numerosa (15-100) receptaculo inserta, brevissima, interdùm basi coalita. *Anth.* oblongæ, erectæ. Fœminei flores, plerùmque in eodem cum masculis pedunculo communi. *Cal.* 0. *Cor. pet.* plurimis 5, aliis 6, aliis fortè 4, plerùmque inæqualia. *Germ.* inferum, 3-quetrum, in plurimis alatum. *Styli* plerisque 3, bifidi. *Stig.* 6. *Caps.* plerisque 3-quetra, alata, 3-loc., basi secus alas dehiscens; aliis biloc.; aliis fortè uniloc. *Dryander in Trans. linn. soc.* 1. 158.

Div. II. Caulescentes, foliis semicordatis.

B. *humilis* caulescens erecta, foliis hispidis semicordatis duplicato-serratis, capsulæ alis rotundatis parùm inæqualibus. *Dryander loc. cit.* 166. *t.* 15.

Begonia humilis. *Hort. Kew.* 3. 353. *ed.* 2. 5. 285. *Willd. sp. pl.* 4. 417. *Jacq. fragm.* 19. *n.* 67; *absque icone; (vix tamen hùc referenda* Begonia humilis *Bonpland nav. et malm.* 151. *tab.* 62. *quæ vel* B. hirsuta *aut species ei propinquior.)*

Begonia suaveolens. *Loddiges bot. cabinet.* 69.

Tota planta carnosa, pellucida. Caulis petioli *et* pedunculi *pallidè rubentes.* Caulis *teres, geniculis tumidis, primo anno spithamæus, altero anno bipedalis.* Fol. *semicordata, acuminata, duplicato-serrata: serraturis ciliatis; suprà saturatè viridia, hispida è strigis mollibus erectis basi tuberculatis, subtus pallidè viridia, glaberrima præter strigas rarioribus in venis, quales etiam in petiolis.* Stipulæ *semiovatæ, concavæ, ciliatæ, hyalinæ.* Pedunculi *axillares, sæpiùs dichotomi.* Bractea *ad basin pedicellorum ovata, ciliata, minuta.* Flor. masc. pet. *alba: 2 cordato-orbiculata magna; 2 minima, quæ in quibusdam floribus omninò desunt.* Fil. *circitèr* 15, *brevissima;* anth. *oblongæ, luteæ.* Flor. fœm. pet. 5, *alba, persistentia, obovato-oblonga: 2 paulò angustiora.* Germ. 3-*gonum, angulis acutis, alis rotundatis, parùm inæqualibus, pallidè carneis.* Styli 3, *brevissimi:* stig. 2-*partita:* laciniæ *divaricatæ dein convergentes et iterùm divergentes, luteæ, tectæ glandulis minimis.* Caps. *figurâ germinis.* Dryand. loc. cit.

The figure of the species and Mr. Dryander's masterly description in the Linnean transactions, are both taken from a dried plant, a circumstance that will account for some slight difference in the appearance it makes in the figure here given, especially when it is recollected that the whole vegetable is succulent and tender. Our specimen, when we

obtained it for description, was not in a state to induce us to attempt to add any further particulars to Mr. Dryander's account; the small bractes had all fallen off; and the flowers withered. We observed that the upper stipules were near an inch in length, oblong, with a longish subulate point, membranous or less succulent than the leaves, the lower ones smaller and more tapered.

This extensive genus, or natural order, as it is made by some botanists, is among the many whose affinity with other vegetable groups has not yet been satisfactorily demonstrated; it has therefore no settled place in any of the natural systems. The species are truly monoicous, having flowers of two different configurations mixed together in the same bunch, those of one kind destined to bear the stamens alone, those of the other placed on a germen supporting the pistils only. The latter are of five petals instead of four, and had not expanded in our specimen.

The title of *humilis* was applied under a false impression, the species having been described and determined from a yearling plant, before it was known that it would survive another season, and grow up to the height of two feet.

The whole genus is tropical, and belongs chiefly to Asia and America. No species has been found on the continent of Africa, though three are native of the adjacent islands. The present comes from the West Indies, where it was observed by Mr. Alex. Anderson. It was first cultivated in this country in 1788, by Messrs. Lee and Kennedy, of the Hammersmith nursery.

Jussieu, in a summary of the general habit of the species, characterizes them as plants that belong naturally to lakes, some few suffrutescent, but the greater portion herbaceous with a leafy stem or else a naked scape. The whole genus has something both of the habit and taste of the Sorrels.

We have omitted in our synonymy the BEGONIA *humilis* of Bonpland, the stem being roughly furred in that, and the foliage deeply indented; it seems to be either the *hirsuta* of this genus, or a species more nearly allied to that than to the present. The inflorescence differs also in some respects.

The drawing was taken at the nursery of Messrs. Loddiges and Sons, Hackney, the only place in which we have ever met with it.

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a A stamen-bearing flower. *b* A pistil-bearing flower. *c* The same with the petals removed; showing the germen, style, and stigmas.

J. Edwards del.

Pub. by J. Ridgway, 2 Ann Pl. Piccadilly, June 1, 1818.

PASSIFLORA racemosa.

Bunch-flowered Passionflower.

MONADELPHIA *PENTANDRIA.*

Nat. ord. PASSIFLOREÆ. *Jussieu in annales du muséum.* 6. 102.
PASSIFLORA. Suprà vol. 1. *fol.* 13.

P. *racemosa*, foliis oblato-cordatis trilobis acuminatis v. interdùm oblongo-ovatis integris, petiolo sub4glanduloso; racemis aphyllis pendulo-terminalibus; segmentis calycinis navicularibus, alâ ventricosâ carinatis, duplo majoribus petalis; coronâ pluriès breviore calyce.
Passiflora racemosa. *Brotero in trans. lin. soc.* 12. 71. *t.* 6.
Passiflora Princeps. *Loddiges's botan. cabinet.* 84.
Martyrio cachudo. *Vernaculè lusit. brasil.*

Perennis. Caulis *teres, glaber, gracili-ramosus, altè scandens, ramis floriferis filiformibus, lentissimis, pro longo spatio sub racèmis loco foliorum cirrhos atque stipulas tantummodò proferentibus.* Fol. 3-4-*uncialia, subcoriacea, glabra, saturatè viridia, inferiora et superiora nonnulla sæpiùs integra, cæterùm trilobata lobis acuminatis sinubus obtusis interstinctis, laterum divergentibus, medio longiore:* petiolus *subduplo brevior laminâ, glandulis parvulis ovatis apice concavis, basi articulatus:* stipulæ *caducæ, erectæ, ovatæ, acuminatæ, venosæ,* $\frac{2}{3}$ *unciæ plùs minùs longæ, glabræ, mucronatæ, basi inæquilateri-obliquatæ, florales subrubentes:* cirrhi *spirales, simplices, axillares.* Flores *pendulo-racemosi, hypocrateriformi-stellati, roseo-punicei, diametro* 4-5-*unciali, inodori, ephemeri;* racemi *remotiùs multi-*(9-13?)*-flori, simplices, stipulacei, partìm cirrhosi,* 7-9-*unciales;* pedunculi *inferiùs geminati unus suprà alterum positus, superiùs solitarii, subunciales, teretes, patentes, paulò infra calycem articulati:* Involucra *triphylla, parùm infra florem posita, tubum floris subadæquantia, caduca, foliolis subsessilibus, ovatis acuminatis, venosis, basi subinæqualibus, mucronatis, stipularum subsimilibus.* Cal. *(clausus clavato-oblongus molendinaceus)* tubo *cylindraceo, carnosulo, longitudine ferè* $\frac{1}{3}$ *limbi, diametro ferè dimidii longitudinis suæ, obsoletè* 10-*striato, infernè virescente, gibbis* 5 *annulato-contiguis paulò protuberantibus, fundo intruso;* segmentis *distantibus, tenuibus, navicularibus, angustis, apice transversè dentato-emarginatis denticulo uno cuticulæ exterioris altero interioris continuo, alâ tenuissimâ profundissimâ sursùm ventricosâ vel de infernè angustâ sursùm arcuatìm latescente carinatis.* Cor. pet. *summo calycis tubo imposita, segmentis calycinis* $\frac{1}{3}$ *circiter minora, lanceolata, planiuscula.* Corona *radiata, triplex, pluriès brevior calyce;* exterior *alternè biseriata, divaricata, pede petalorum insita radiis extimis filiformibus carnosulis obtusis purpuro et albo variegatis, intimis nanis tuberculiformibus;* interior *paulò infra os tubi (cujus cutis intimæ continua) posita, uniseriata, connivens, radiis membranaceo-filiformibus, chloroleucis, clavato-capitatis, apice sanguineis.* Operculum *chloroleucum, duplex, inclusum;* superius *extùs inferiori ponè marginem interiorem insidens, erectum, cylindricum, formâ et mensurâ ferè tubi calycini, membranosum, plicato-striatum, dentato-fissum dentibus glanduloso-marginatis à facie interiori obliquè truncatis et stipiti columnæ circumcircà accumbentibus;* inferius *crassum, carnosum, breve, horizontale, repando-dentatum, nectario obliquè incumbens:* nectarium *septo incompleto parietali intùs transversè concameratum.* Columna *parùm brevior flore:* stipes *sesqui-*

uncialis, viridis rubro-maculosus, infernè pentagonus, supernè teres. Fil. *pro longitudine antherarum discreta, recurvo-patentia, viridiuscula, ligulata, nervo medio intùs prominulo:* anth. *lineari-oblongæ, viridi-lutescentes.* Germ. *oblongum, obsoletè trilobum, viridescens, glabrum, opacum:* styli *viridiusculi, clavati, recurvati, primò sublongiores germine:* stigmata *subpulvinato-orbicularia.*

This fine species blossomed, we believe, for the first time in our country, at the nursery of Messrs. Loddiges, Hackney, and has been already figured in the "Botanical Cabinet," a work edited by those ingenious and industrious horticulturists to record the rare and curious plants which flower in that extensive collection. It was there that we had the opportunity of taking the present drawing from a sample cultivated in a hothouse where the use of tan has been discontinued, and its agency supplied by the introduction of steam.

The plant is indigenous of the Brasils, and was observed by the late Mr. E. J. A. Woodford growing wild in the shade of the woods, near the shore, at the distance of about a league from the city of Rio Janeiro. By this gentleman it was brought to Lisbon, cultivated there, and through his means communicated to Professor Brotero, by whom a drawing and description of it were transmitted to the Linnean Society of London, both of which appear in the twelfth volume of the Transactions of that body. The species is distinguishable among the others by the long leafless racemes, that terminate the branches, and which have procured it the name of *Martyrio cachudo* (bunch-flowered Passionflower) among the Brasilian colonists. At some points it approaches to PASSIFLORA *adiantifolia*, of the 233d article of this publication. In its own country it blossoms in November and December, producing usually two stems from the same stock, one of which proves fertile, and is without leaves while so; the other remains barren and in leaf, becoming fertile in its turn the ensuing season.

Perennial. *Stem* round, smooth, dividing into slender high-climbing branches, flowerbearing ones pendulous and deprived of leaves for some distance below the inflorescence, having in their places only stipules and tendrils. *Leaves* 3-4 inches long, substantial and subcoriaceous, smooth, deep green, some of the lowermost and uppermost entire and oblongly ovate, the rest oblately cordate and three-lobed, lobes

acuminated, parted by obtusely cornered sinuses, side-ones divergent, middle one the largest: *petiole* about twice shorter, jointed at the base, usually bearing 4 small ovate glands, hollowed at the top: *stipules* caducous, upright, ovate, acuminated, veined, $\frac{2}{3}$ of an inch long more or less, smooth, mucronate, slanting and uneven-sided at the base, floral ones reddish: *tendrils* simple, spiral, axillary. *Flowers* in pendulous racemes at the ends of the branches, hypocrateriformly stellate, of a rosy crimson colour, 4-5 inches in diameter, without scent: each *raceme* remotely many (9-13)-flowered, simple, having stipules in the place of leaves, and partially tendrils, 7-9 inches long; lower *peduncles* two together, one above the other, upper ones single, about an inch long, round, spreading, with a joint not far below the calyx: *involucres* three-leafletted, at the joint below the flower, about even with the tube of the flower, caducous, *leaflets* subsessile, ovate, acuminated, veined, &c. in fine very like those of the stipules. *Calyx* (while closed clavately oblong, 5-cornered and deeply winged): *tube* cylindrical, fleshy and firm, about $\frac{1}{3}$ of the length of the limb, with a diameter of about half its own length, obsoletely 10-streaked, greenish below, with a slightly protuberant circle of 5 contiguous bosses at the circumference of the bottom, dinted underneath; *segments* far asunder, thin, navicular or boat-shaped, narrow, transversely bidentate at the end, one toothlet being the continuation of the outer cuticle, the other of the inner, with a broad thin ventricosely deepened wing at the keel. *Petals* of the *corolla* placed at the edge of the tube of the calyx, and $\frac{1}{3}$ smaller than its segments, lanceolate, flattish. *Crown* radiated, triple, several times shorter than the calyx; *outer one* of two ranks, with alternating outspread radii placed at the foot of the petals, outer rank of filiform fleshy blunted rays, particoloured purple and white, inner of small stumps resembling tubercles; *inner one* situated within and a little below the mouth of the tube of the calyx, of the lining of which it is the continuation, of only a single row, convergent, *rays* membranous, filiform, greenish white, clavately capitate, blood-red at the top. *Operculum (or lid of the nectary)* greenish white, double; *the upper one* placed on the outside of the lower one a little behind its margin, upright, cylindrical, of nearly the shape and dimensions of the cavity of the tube of the calyx, membranous, plaitedly streaked, dentately cleft, teeth convergent, glandularly edged and obliquely truncated inwards,

whence they face together round the shaft of the column; *lower one* thick, fleshy, short, obliquely incumbent, repandly indented: *nectary* divided transversely by an incomplete circular ledgelike partition. *Column* scarcely shorter than the flower: *shaft* about 1½ inch high, green, marked with irregular red spots, pentagonal below, round upwards. *Filaments* separated to the length of the anthers, recurvedly spreading, greenish, ligulate, with an inwardly prominent midrib: *anthers* linearly oblong, greenish yellow. *Germen* oblong, faintly 3-lobed, greenish, opaque, smooth: *styles* greenish, clavate, recurved, at first rather longer than the germen: *stigmas* pulvinately orbicular. According to Brotero the fruit is an oblong pale green smooth 3-furrowed berry, about 2 inches in length. This appears to have ripened at Lisbon.

o The tube of the calyx. *a* The long rays of the outer crown. *b* The short rays, or rather rudiments of rays. *c* The inner convergent crown. *d* The upper operculum or ruffle. *e* The lower operculum or ruffle. *f* The incomplete partition of the nectary.

Tyd. Edwards del.

Pub. by J. Ridgway & Sons. 170 Piccadilly June. 1 1818

Smith &

BLANDFORDIA nobilis.

Scarlet Blandfordia.

HEXANDRIA *MONOGYNIA.*

Nat. ord. NARCISSI. *Jussieu gen.* 54. *Div. I.* Germen superum.
HEMEROCALLIDEÆ. *Brown prod.* 1. 295.

BLANDFORDIA. Cor. tubulosa, ore sexlobo, marcescens. *Stam.* tubo imposita. *Antheræ* basi extinctoriiformi affixæ. *Germ.* pedicellatum. *Stylus* subulatus. *Stig.* simplex. *Caps.* prismatica, tripartibilis, partialibus angulo interno dehiscentibus. *Sem.* biseriata, marginibus suturæ inserta, testâ laxâ pubescenti.

Herbæ perennes. Radix *fibrosa.* Fol. *radicalia linearia elongata, basi dilatatis semivaginantibus; caulina distantia, abbreviata.* Caulis *teres, simplex.* Racemus *terminalis, indivisus.* Pedicelli *floriferi recurvi, fructiferi erecti; basi bibracteati, bracteâ alterâ interiore laterali minore. Affinitate proximè accedit* HEMEROCALLIDI cæruleæ. *Brown prod.* 1. 295.

B. *nobilis*, bracteis pedunculo florifero duplò brevioribus, foliis angusto-linearibus. *Brown l. c.* 296.

Blandfordia nobilis. *Smith exot. bot.* 1. 5. *t.* 4. *Aiton's Epitome.* 364; *in add.*

Rhizoma *horizontale, carnosum.* Folia *radicalia plura, ambientia, à plano obversa, erecto-patentia, vix duas lineas latitudine excedentia, canaliculato-explicata, carinata, tandèm margine revoluta.*

One of the few ornamental liliaceous plants yet found in New Holland, and adopted by Sir James Edward Smith, in his Exotic Botany, as the basis of a separate genus. Another species, belonging, like this, to the neighbourhood of Port Jackson, has been subsequently observed by Mr. Brown, and recorded in his Prodromus of the Flora of those regions; where it is ranked in an ordinal group, first embodied in that work under the title of *Hemerocallideæ*, the co-ordinates of which scarcely differ from those of the *Lilia* of Jussieu, except in having the lower part of the corolla tubular, and not divided to the base. The ALETRIS *punicea* of Labillardière is considered by Mr. Brown rather as the synonym of his B. *grandiflora* than of the present species.

The drawing was taken from a plant that flowered in April last, in the greenhouse of Messrs Whitley, Brames, and Milne, at Fulham, and had been imported from Botany Bay. We are told that it is the first sample which has

bloomed in this country. Not having had an opportunity of dissecting the flower, we shall not attempt to make any addition to the very correct outline of it by Mr. Brown.

A perennial herbaceous plant. *Rootstock* fleshy. *Radical leaves* several, surrounding the stem, the flat side facing inwards, narrowly linear, elongated, scarcely exceeding two lines in breadth, channelled, keeled, ultimately revolute along the edges, membranously enlarged and half-sheathing at the base: *cauline ones* distant, short. *Stem* round, simple. *Raceme* terminal, undivided. *Peduncles* while flowerbearing recurved, when fruitbearing upright; *bractes* at their base double, twice as short, one interior and shorter than the one at the side. *Corolla* tubular, six-lobed at the orifice, withering. *Stamens* placed on the tube. *Anthers* fixed on at the conical aperture of the base. *Germen* pedicled. *Style* subulate. *Stigma* simple. *Capsule* prism-shaped, partable into three, each of which opens at the interior angle. *Seeds* in two rows, inserted at the edges of the seam or suture, *testa* or *outer coat* loose, pubescent.

The germen begins to protrude from the mouth of the flower, soon after the flower expands.

Paul Edwards del. Published by J. Bedgway & Sons 170 Piccadilly. June 1st 1818. Smith sc.

LACHENALIA pallida. β.

Straw-coloured pale-flowered Lachenalia.

HEXANDRIA *MONOGYNIA.*

Nat. ord. ASPHODELI. *Jussieu gen.* 51. *Div. III.* **Flores spicati.** Radix bulbosa. Corolla basi tubulosa.

LACHENALIA. Cor. infera, **sexdivisa, oblato-v. cylindrico-campanulata,** laciniis 3 exterioribus brevioribus oblongis calycino-conniventibus carunculâ externâ infra apicem, interioribus 3 alternis suprà rotundato-dilatatis patulis. *Fil.* basi laciniarum corollæ inserta, subassurgentia: *anth.* incumbentes. *Stylus* subassurgentèr porrectus: *stig.* simplex. *Caps.* membranosa, subtrilobo-trigona, 3-loc., 3-valv. valvis medio septiferis: *sem.* biseriata, plura in loculo, globosa.

Bulbus *tunicatus;* fol. 1-*plurima, ambientia, subcarnosa, tenera, linearia ad lato-ovata.* Scapus *carnosus.* Flores *erecto-spicati v. racemosi, undìque sparsi. In* SCILLÂ *proximâ corollarum laciniæ conformes atque æquilongæ, organa recta. In* DRIMIÂ *corolla reflexa et æqualis, stamina recta. Collineat* MASSONIAM *à pusillâ suâ.*

L. *pallida*, corollis campanulatis, petalis 3 interioribus longioribus, floribus brevissimè pedunculatis horizontalibus, foliis lineari-oblongis scapo longioribus. *Hort. Kew.* 1. 460.

Lachenalia pallida. *Thunb. prod.* 64. *Redouté liliac.* 22. *Willd. sp. pl.* 2. 172. *Hort. Kew. ed.* 2. 2. 285.

Lachenalia mediana. *Jacq. ic. rar.* 2. *t.* 392. *coll.* 3. 242.

(α) flore pallido subcærulescente.

(β) flore pallido sublutescente.

Fol. *bina*, 9-*uncialia v. pedalia, erecto-recurva, glabra, lucida, semunciam v. ultrà latiora, infernè convoluto-vaginosa.* Scapus *glaucescens.* Racemus *multiflorus, laxiusculus;* floribus *horizontalibus*, pedicellis *pluriès brevioribus corollâ*, bracteis *latè ovato-acuminatis, brevibus.* Cor. ⅓ *unciæ paulò exsuperans, oblonga, cylindraceo-campanulata, suburceolata;* lac. 3 exteriores ⅓ *circitèr breviores, obtusissimæ carunculâ externâ viridi infra apicem, subcarinatæ, una summa sublongior conspicuiùs carinata*, 3 interiores *spathulato-obovatæ, pallidiores, tenuiores, carinâ suprà obsoletè virente, una subangustior emarginata.* Stam. *conniventia, subæqualia corollæ:* pollen *luteum.* Germ. *viride, oblongum, subconicum, rotundatè hexagonum sulcis* 3 *alternis profundiùs impressis.*

A genus closely akin to SCILLA: differing chiefly in having the three alternate outer segments of the corolla shorter than the three inner, which last have also a dilated blade, and by the stamens and style being slightly bowed, as in ALOË. About 30 species are known, all natives of the Cape of Good Hope. Some of them are very ornamental: indeed we do not know a handsomer plant than the spotted leaved variety of LACHENALIA *quadricolor*, which, when

grown in large patches, as we have seen it at Mr. Griffin's, makes even a gayer and more showy appearance than the Hyacinth or Tulip planted in the same way. All seem of easy culture, and are propagated abundantly by offsets from their bulbs. A conservatory or greenhouse is the situation that suits them best, and a mixture of loam and peat-earth the fittest mould for them.

We take our plant to be a mere seminal variety of *pallida*, the prototype sample of which has pale blue colour in those parts of the corolla where the present has pale yellow; and we see nothing to determine their distinction as species. The drawing was made last March at Mr. Griffin's, at South Lambeth, from a plant imported from the Cape of Good Hope.

Bulb tunicated. *Leaves* two, uprightly recurved, linearly oblong, smooth, shining, from 9 inches to about a foot high, half an inch broad or more, convolutely sheathing at the lower part. *Scape* somewhat shorter than the leaves, glaucous. *Raceme* many-flowered; *flowers* rather loosely arranged, horizontal; *pedicles* several times shorter than the corolla; *bractes* broadly ovate, short, pointed. *Corolla* scarcely exceeding ½ of an inch in length, oblong, cylindrically campanulate, slightly urceolate; 3 *outer segments* about ⅓ shorter than the others, very obtuse with a greenish subtriangular caruncle on the back a little below the top, one rather longer than the rest, and more conspicuously keeled, 3 *inner ones* spatulately obovate, pale, thinner, with an obsolete green streak at the upper part of the keel, one of them rather narrower than the rest, with a deep notch at the end. *Stamens* converging, nearly equal to the corolla: *pollen* yellow. *Germen* green, oblong, slightly conical rounded hexagonal six-furrowed, with three of the furrows deeper than the others.

LACHENALIA *viridis* and SCILLA *serotina*, have both been removed from their former places, and transferred to the genus UROPETALON, of which a species has been represented in the 156th article of this publication.

Syd. Edwards del.

Pub. by J. Ridgway 10 York Pl. 170 Piccadilly June 1 1818

Smith sc.

BORAGO orientalis.

Oriental Borage.

PENTANDRIA *MONOGYNIA.*

Nat. ord. Boragineæ. *Jussieu gen.* 28. *Div. IV. Brown prod.* 1. 492.

BORAGO. Cal. 5-partitus. *Cor.* hypogyna rotata 5-fida, plerumque patens; (*faux* instructa 5 squamis calcarum instar cavis, intrà corollam prominulis in ejusdem laciniarum basi; extrà hiulcis:) *squamulæ* obtusæ emarginatæ. *Stigma* 1: (*fructus* gymno-tetraspermus:) *sem.* rugosa, calyce connivente tecta. *Herbæ plerùmque asperifoliæ.* Juss. l. c. 131.

B. *orientalis*, calycibus tubo corollæ brevioribus, foliis cordatis. *Linn. sp. pl.* 1. 197.

Borago orientalis. *Mill. dict. ed.* 8. *n.* 2. *Hort. Kew.* 1. 184. *ed.* 2. 1. 297. *Smith prod. fl. græc.* 122. *Fl. græca* 63. *tab.* 175. *Willd. sp. pl.* 1. 778.

Borago constantinopolitana. *Mill. ic.* 1. 45. *t.* 68.

Borago constantinopolitana, flore reflexo cæruleo, calyce vesicario. *Tourn. cor.* 6. *Ejusd. it.* 2. 13. *cum icone. Buxb. cent.* 5. 16. *t.* 30.

Radix *tuberosa, perennis, extùs nigra.* Caulis *herbaceus, erectus, pedalis aut sesquipedalis, angulato-teres, hispidus, purpurascens; supernè paniculato-ramosus, foliolosus.* Fol. radicalia *maxima, longiùs petiolata, cordata, acuta, undulata, reticulato-venosa; utrinque setoso-scabra, subtùs pallidiora:* caulina *minora, alterna, breviùs petiolata; superiora ovato-lanceolata, basi elongata, angustata, subsessilia.* Petioli *canaliculati, subretrorsùm hispidi, basi vaginantes.* Racemi *in apicibus ramorum, gemini, breves, pilosi, nutantes, bracteati.* Bracteæ *ovatæ, obtusæ, pilosæ, pedicellis breviores.* Flores *copiosi, purpuro-cærulei, cernui.* Calycis *laciniæ obovato-oblongæ, pilosæ, erectæ.* Corollæ tubus *calyce duplo ferè longior, albus, sursùm ampliatus;* faux *intùs pilosa, valvulis brevibus rotundatis, emarginatis, pubescentibus, albis coronata;* limbus *purpuro-cæruleus, tubo longior, laciniis linearibus, subtùs pilosis, basi horizontalibus, apice revolutis.* Stam. *fauce inserta, limbo explanato breviora, subulata, erecta, conniventia, incarnata, intùs pilosa.* Antheræ *incumbentes, oblongæ, nigræ.* Germ. *parvum, 4-fidum.* Stylus *filiformis, roseus, glaber, staminibus parùm longior.* Stig. *obtusum, nigrum.* Smith Flor. Græca. l. c.

Indica, zeylanica, and *africana,* three former species of this genus, have been lately withdrawn by Mr. Brown, and combined into a separate group by the title of Trichosdesma, distinguished from Borago by a considerable difference in the structures of the anther and fruit, as well as by not having the remarkable appendices which crown the mouth of the tube of the corolla in that. A reform by which *Borago* is reduced to five or six recorded species, all, we believe, belonging exclusively to the Levant and the Coast of

Barbary, except *officinalis*, which is common to our own country as well as many other parts of Europe.

Orientalis is found wild in Turkey; was received by Miller from the Botanic Garden at Paris, and cultivated at Chelsea in 1752. Flowering here in the open ground as early as March, the blossom is very liable to be defaced by the cold winds of that month, and is not often seen in perfection with us. Miller recommends the planting of it in old rubbish or on walls, where it grows less rankly, and is of course not so subject to be injured by the effects of early frosts, which sometimes destroy it in other situations.

Rootstock perennial, fleshy, 4 or 5 inches long, rather smaller than the finger, blackish without, white within. *Root-leaves* petioled, large, cordate, acuminated, undulated, reticulately veined, of a dingy green, thinnishly hispid on both sides, from 3 to 5 inches broad, sometimes nearly 6 long: *petioles* channelled, nearly of the same length as the blades, thickly and subreversedly hispid, sheathing at the base; *stem-leaves* small, alternate, more shortly petioled, uppermost ovately lanceolate, nearly sessile, tapered at the base. *Stem* herbaceous, upright, from a foot to a foot and a half high, angularly round, hispid, purplish; upwards paniculately branched, and leafy. *Racemes* at the top of the branches, twin, short, furred, nutant, bracteate. *Bractes* ovate, obtuse, furred, shorter than the pedicles. *Flowers* numerous, light-purplish-blue, cernuous. Segments of the *calyx* obovately oblong, furred, upright. *Tube* of the *corolla* nearly twice as long as the calyx, white, enlarged upwards; *faux* furred within, encircled at the top by short rounded emarginate pubescent white valvules (hollow like the spur of a flower, with the orifice opening on the outside); *limb* longer than the tube, segments linear, furred underneath, horizontal at the bottom, revolute at the top. *Stamens* inserted into the faux, shorter than the limb when expanded, upright, connivent, subulate, furred within, pinkish. *Anthers* incumbent, oblong, black. *Germen* small, 4-cleft. *Style* filiform, rose-coloured, smooth, but little higher than the stamens. *Stigma* obtuse, black.

The principal part of the above specific description is a version of Sir J. E. Smith's, in the Flora Græca.

The drawing was taken at the nursery of Messrs. Whitley and Co. Fulham.

Syd. Edwards del

Pubd by J. Sowerby & Sons 156 Piccadilly June 1 1818

Smith Sc

CALENDULA graminifolia.

Grass-leaved Cape Marygold.

SYNGENESIA *POLYGAMIA NECESSARIA.*

Nat. ord. CORYMBIFERÆ. *Jussieu gen.* 177. *Div. III.* Recept. nudum. Sem. nudum s. non papposum. Flores radiati.
CALENDULA. Suprà vol. 1. *fol.* 28.

C. *graminifolia*, foliis linearibus subintegerrimis, caule subnudo (unifloro, seminibus obcordato-orbiculatis lævibus). *Linn. sp. pl.* 2. 1305.
Calendula graminifolia. *Mill. dict. ed.* 8. *n.* 7. *Berg. cap.* 311. *Thunb. prod.* 163. *Hort. Kew.* 3. 271. *ed.* 2. 5. 167. *Willd. sp. pl.* 3. 2345. *Loddiges's bot. cabinet.* 57.
Calendula foliis linearibus denticulatis et integerrimis. *Mill. ic.* 1. 51. *t.* 76. *f.* 1.
Calendula africana surrecta, rosmarini folio. *Pluk. mant.* 35. *t.* 370. *f.* 7.
Caltha africana, foliis croci angustis, florum petalis externè purpurascentibus internè albis. *Boerh. lugdb.* 1. 113.
Dimorphotheca statices folio. *Vaill. in act. paris.* 1720. 280.
Bellis africana, florum pediculis foliosis, foliis angustis et integris. *Comm. hort.* 2. 67. *t.* 34.

Rhizoma *in caudicem brevem divisum undique foliosum exurgens.* Fol. *linearia, angusta, amplexicaulia, scabriùs villosa, ciliata, integra v. sæpè margine dentibus nonnullis vagis distantibus brevibus interrupto, deorsùm subattenuata, nervo medio crassiore carinata, basi dilatata canaliculata;* caudicina *numerosa, infernè imbricato-approximata, subsuncialia;* caulina *vaga remotiora decrescentia.* Caules *ramorum caudicis continuo-terminales, sesunciales ad pedales,* 1-*flori, scabro-pubescentes, anguloso-teretes, sub flore longè aphylli, obscurè virentes, propè calycem incrassati et fistulosi.* Cal. *virens, scabro-pubescens, turbinato-patentissimus, foliolis lineari-lanceolatis membranaceo-marginatis.* Cor. *subsesquiunciam transversa, disco nigrescens, radio intùs alba, pede purpurascens, extùs purpureo-fulvescens.* Flosc. radii *duplo longiores calyce, lineari-lanceolati, tridenticulati, lineis* 4 *obscuris ad dorsa,* tubo *brevi purpureo glanduloso-lanato;* stig^{a}. 2 *filiformibus replicatis:* flosc. disci *fulvescentes, pilosiusculi, limbi laciniis acuminatis, apice nigricantibus;* anth^{æ}. *apiculis* 5 *membranosis nigricantibus,* polline *vitellino-flavescente;* stig^{æ}. *subclavato-obtusatis apice pubescentibus nigricantibus.* Germ. radii *viridia, obovato-oblonga,* 3-*gona, scabra;* disci *obcordata, alato-compressa, margine scabra.*

A genus belonging to an order of the syngenesious class, where the florets of the circumference of the flower are provided with fertile pistils, but have no stamens; while those of the centre have both stamens and pistils, the latter of which however are sterile, and act merely as auxiliaries to the stamens in dispensing the pollen to the otherwise unprovided stigmas of the ray.

The species is native of the Cape of Good Hope, and was cultivated at Chelsea in 1731; but had been known in Holland as far back as 1698. At present a very rare plant in our collections. The specimen from which the drawing was made grew in the greenhouse of the Comtesse de Vandes at Bayswater, and was produced from imported seed.

Perennial. *Rootstock* rising into a short thickly leaved branching *stem (caudex)*. *Leaves* very narrow, linear, not very unlike those of the Crocus, in Vaillant's view, like those of the Cushion Pink, roughly villous, ciliated, entire or sometimes with the margin broken by a few distant short teeth, tapered downwards, keeled underneath by a thick prominent midrib, stemclasping, broader and channelled at the lower part, *those of the stem* numerous, set round at all points, imbricately crowded below, about 3 inches long, *those of the flowerstalks* scattered loosely and growing gradually shorter. *Flowerstalks* continuously terminal of the arms of the stem, often reclined, from 6 inches to a foot long, one-flowered, roughly pubescent, angularly round, leafless to a great distance below the flower, dark green. *Calyx* herbaceous, roughly pubescent, leaflets lanceolately linear sides membranous. *Corolla* about an inch and a half in diameter; *disk* blackish; *ray* white on the inside and purple at the foot, on the outside of a purplish tawny brown: *florets of the ray* twice the length of the calyx, marked with 4 dark lines at their backs, tridenticulate, with a short purple glandularly wooled tube: *florets of the disk* subpubescent, segments of the limb pointed and black-topped: *anthers* with 5 blackish membranous points: *pollen* orange-yellow: *stigmas* clavately obtuse, black: *germens of the ray* obovately oblong, trigonal, rough: *of the disk* obcordate and flatly compressed.

Drawn by H.

Pub. by I. Ridgway & Son. 170 Piccadilly, June 1 1818

Engd.

IPOMŒA bona nox. β. *purpurascens.*

Purple afternoon flowering Ipomœa.

PENTANDRIA *MONOGYNIA.*

Nat. ord. Convolvuli. *Jussieu gen.* 132. *Div. I.* **Stylus unicus.** Convolvulaceæ. *Brown prod.* 481. *Sect. I.* **Germen** unicum.

IPOMŒA. Suprà vol. 1. *fol.* 9.

I. *bona nox*, glaberrima: caule sarmentoso, passìm scabrato *(radicante?)*: foliis lato-cordatis, integris s. diversè angulosis; pedunculis 1-3-floris: calyce aristato: corolla maxima, alba; tubo angustè longissimo, virescente, fasciis limbi concoloribus. *Michaux bor. amer.* 1. 140.

Ipomœa bona nox. *Linn. sp. pl.* 1. 228. *Willd. sp. pl.* 1. 882. *Gærtn. sem.* 2. 247. *t.* 134. *f.* 3. *Curtis's magaz.* 752. *Jacq. hort. schœnb.* 1. 16. *t.* 36. *Hort. Kew.* 1. 216. *ed.* 2. 1. 339. *Pursh amer. sept.* 1. 145.

I. sylvestris, foliis et floribus amplissimis: tubis florum subteretibus. *Browne jam.* 155.

Convolvulus maximus, caule spinulis obtusis obsito. *Sloane jam.* 1. 151. *t.* 96. *f.* 1.

(β) minor, flore purpurascente, calyce vix aristato, genitalibus fauce tubi inclusis.

Ipomœa bona nox. *Herb. Banks. Exemplar hortense.*

Caulis *volubilis v. sarmentosus, radicans, subrubescens.* Fol. *sinû profundo ad basin excisa, acuminata acumine angusto producto mucronato, 3-5-uncialia;* petiolo *ipsis parùm breviore firmo.* Pedunculi *axillares, crassi, breves,* pedicellis *carnosis, augescente germine clavatìm extumescentibus, infra unciam longis, basi sæpiùs* bracteolâ *appressâ munitis, cum fructû refractìm nutantibus.* Cal. *connivens, multotiès brevior tubo,* foliolis *ovato-lanceolatis medio carnosis cum carinâ acutâ, lateribus membranosis, acuminatis, acuminibus interdùm aristato-productis.* Cor. *hypocrateriformis;* tubo *2-4-unciali cylindrico in faucem breviorem parùm latiorem abeunte, cum eâ simul limbo duplo longiore, virente v. purpurascente:* limbo *2-4-unciali, planiusculo, brevissimè quinquelobo albo, v. purpurascente, lobis lato-acuminatis, mucronatis.* Stam. *vel faucem parùm exsuperantia v. intra hanc inclusa;* fil. *basi subpubescentia;* anth. *ochroleucæ.* Stig. *capitatum granulosum, levitèr 4-fidum, album.* Caps. *biloc.;* sem. 2 *in quolibet loculamento, glabra.*

In our judgment the present plant can be regarded only as a variety of the species of this name. It expands its flowers like the other plants of that in the evening, and has all their features, except in as far as regards the colour of the corolla, the smaller size of the parts (where however the same proportions are preserved), a calyx in which the leaflets can scarcely be said to be either so far or so slenderly prolonged as to be called awned, as they are in the other, and the shortness of the floral organs, which do not emerge

from the mouth of the faux as there. The excrescences which are seen on the stem, especially near the knots where the leaves issue, and which have been usually held to be spines, seem to us in both varieties mere sprouting radicles, such as are met with in other plants that grow along the ground as this sometimes does. In the Banksian Herbarium there is a specimen of our variety, which had flowered in some collection in this country many years ago.

A smooth annual plant. *Stem* sometimes twining, sometimes sarmentose, reddish. *Leaves* broadly cordate or sometimes variously angular, acuminated, with longishly tapered mucronate points, from 3 to 5 inches long; *petiole* nearly of the same length, firm. *Peduncles* axillary, thick, short, 1-3-flowered; *pedicles* fleshy clavately thickened, thickening with the growth fruit, and ultimately refracted together with that, bearing generally a small close-pressed bracte at the base. *Calyx* many times shorter than the tube; *leaflets* ovately lanceolate, converging, fleshy along the middle with a sharp keel, sides widish, membranous, acuminate. *Corolla* hypocrateriform; *tube* 2-4 inches long, ending in a shorter rather wider *faux*, together with which it is as long again as the limb; *limb* from 2 to 4 inches in diameter, nearly flat, very shallowly 5-lobed, lobes broadly tapered mucronate. *Stamens* either rising a little above the mouth of the faux, or remaining within it. *Stigma* capitate, granular, slightly 4-cleft. *Capsule* bilocular, 4-seeded.

The drawing was taken from a sample which flowered in Mr. Herbert's hothouse at Spofforth. Both varieties are natives of the West Indies. The white one, of Carolina and Georgia as well as the West Indies.

Syd. Edwards del.

Pub. by J. Ridgway & Sons 170 Piccadilly June. 1 1818

Smith. Sc.

CEANOTHUS azureus.

Azure-flowered Ceanothus.

PENTANDRIA *MONOGYNIA.*

Nat. ord. RHAMNI. *Jussieu gen.* 376. *Div. IV.* Stamina petalis opposita. Fructus tricoccus.

CEANOTHUS. Cal. turbinatus 5-fidus (corollifer). *Pet.* 5 squamiformia longiùs unguiculata (saccata fornicata). *Stam.* sub petalis. *Germ.* 3-gonum; *stylus* 1, 3-fidus; *stig.* 3. *Bacca* sicca 3-cocca 3-partibilis, coccis intùs dehiscentibus 1-spermis, basi calycis persistenti imposita. *Frutices:* fol. *alterna;* flores *racemosi, terminales aut axillares.* Juss. l. c. 380.

C. *azureus*, pubescens; foliis ovato-oblongis acuminatis, scabro-serratis, subtùs ramisque tomentosis, paniculis thyrsoideis: partialibus et simplicibus brevibus ex fasciculis plurifloris in pedunculo crasso tomentoso à basi ad apicem dispositis.

Ceanothus azureus. *Desfont. tabl.* 232; (*ed.* 1816).

Ceanothus cæruleus. *Loddiges's botan. cabinet.* 110.

Frutex erectus, ramis teretibus tomentosis, tandèm subferrugineis. Fol. *subtriuncialia latitudine sesquiuncialia v. circitèr, molliuscula, suprà nudiùs pubescentia virentia immersè nervosa et subrugoso-venosa nervis 3 principibus longitudinalibus ascendentèr ramosis subtùs varicosis, serraturæ marginalis dentibus mucrone vel spinulâ cartilagineâ præfixis, tomento paginæ pronæ tandem subferrugineo:* petiolus *pluriès brevior lamina pubescens:* stipulæ *aridæ, caducæ, acuminatæ.* Paniculæ *in ramulis oppositis axillaribus provenientes, bracteatæ, axillares, simplices semunciam vix excedentes, terminales compositæ partialibus alternis* bracteis *furfuraceis caducis loco foliorum interstinctis:* pedicelli 1-*flori filiformes æquales pilosi albidi erecti per phalanges plurifloros bracteatos aggregati.* Flores *azurei, inexpansi magnitudine granum seminis Coriandri subæquantes.* Cal. *petalorum concolor at opaciùs, oblato-campanulatus, subpentagonus, ultra medium 5-fidus segmentis conniventibus ovato-angulatis membranaceis.* Cor. *erecto-radiata;* pet. 5, *fornicato-vel galeato-spathulata, divisuris calycis insita hisque ½ circà longiora, æqualia;* unguis *lineari-angustus, convoluto-canaliculatus, deorsùm attenuatus;* lamina *introrsum galeato-fornicata lateribus productioribus, antheram usque ad anthesin fovens.* Stam. *æqualia petalis:* fil. *fundo calycis inserta erecta:* anth. *luteæ, erectæ, subrotundo-ovatæ, quadrilobo-biloculares, loculis compressis.* Germ. *viridissimum, oblatum, glabrum, 3-angulare, cinctum annulo glanduloso disci calycini:* stylus *tripartitus, cærulescens, divisiones filiformes fasciculatæ apice replicatæ æquales calyci, puncto stigmatoso simplici.*

Mr. Brown, while visiting the garden of La Malmaison near Paris the year before last, saw this rare, and then unrecorded, shrub, in one of the garden-frames of that establishment, and was much struck by its beauty, the plant being at that time loaded with clusters of fragrant azure blossom. It has been since imported into this country

from Mr. Parmentier's collection, at Englien, by Messrs. Loddiges; and our drawing was made from a sample which flowered in their nursery at Hackney in April last. It is said to be very difficult to propagate, consequently likely to continue rare. Probably native of Mexico, certainly of America, but not of New Holland, as has been stated elsewhere. It ranks in the same natural order as the Buckthorns of our own country; but the group to which it has been generically restricted, is not represented in Europe by any indigenous species, though it is in each of the other quarters of the world.

Branches round, tomentose, slightly tawny. *Leaves* about 3 inches long, about one and a half broad, ovately oblong, pubescent, soft, acuminated, serrated with teeth headed by a minute cartilaginous spinous point, green above and transparently pubescent, tomentose underneath and slightly tawny, somewhat wrinkly veined above, nerved, the three principal nerves prominent on the under, depressed on the upper side. *Panicles* produced on opposite axillary branchlets, short, thyrselike, axillary and terminal, the former simple, the latter compound, the partial ones separated by thin dry bractes in the place of leaves; *pedicles* one-flowered filiform simple equal hairy disposed in fascicles separated by bractes from the base to the top of a short tomentose *peduncle*. *Flowers* blue, when unopened nearly of the diameter of a Coriander seed. *Calyx* corollabearing, of rather a more opaque blue than the petals, oblately campanulate, slightly pentagonal, segments ovately angular, membranous, convergent. *Corolla* uprightly spread; *petals* 5, vaultedly spatulate, situated in the intervals of the segments of the calyx, radiately distinct, equal; *unguis* linearly narrow, convolutely channelled, tapered downwards; *lamina* helmetshaped, with the sides deeper than the upper part, serving as the cradle of an anther. *Stamens* equal to the petals; *filaments* inserted into the bottom of the calyx, upright; *anthers* yellow, roundovate, 4-lobed. *Germen* bright green, smooth, oblate, triangular, surrounded by the thick glandular ring of the disk of the calyx: *style* 3-parted, blue, divisions filiform, fascicled, divergently recurved at the top, equal to the calyx, terminating in simple stigmatose points.

Sydt Edwards del Pub by S. Rodgers & Son. 23d Broadway Feby 1 1813

DIRCA palustris.

Leatherwood.

OCTANDRIA *MONOGYNIA.*

Nat. ord. THYMELEÆ. *Jussieu gen.* 76. *Brown prod.* 1. 358.
DIRCA. Cal. 0. *Cor.* tubulosa: limbo obsoleto. *Stam.* tubo longiora. *Drupa* 1-sperma. *Willd. sp. pl.* 2. 424.

Frutex *altitudine humanâ. Facies* DAPHNES Mezerei. Flores *sub frondescentiâ terni è singulâ gemmâ, pedunculis propriis brevissimis insidentes, nutantes.* Ligni *substantia tenacissima vix absque cultro frangenda.* Cortex *itidem tenacissimus.* Lin. amœn. acad. 3. 13.

Dirca palustris. *Amœn. acad.* 3. 12. *t.* 1. *f.* 7. *Lin. sp. pl.* 1. 512. *Gron. virg. ed.* 2. 60. *Mill. dict. ed.* 8. *n. Duham. arb.* 1. *t.* 212. *Hort. Kew.* 2. 27. *ed.* 2. 2. 411. *Michaux bor. amer.* 1. 236. *Pursh amer. sept.* 1. 268. *Schkuhr handb.* 1. 337. *t.* 107. *b.*

Thymelæa floribus albis, primo vere erumpentibus, foliis oblongis acuminatis, viminibus et cortice valdè tenacibus, undè nomen anglicùm Leatherwood. *Clayt. MSS. n.* 858.

Frutex *erectus fastigiato-ramosus juncturis ramulorum tumidiusculis cortice fusco glaberrimo.* Gemmæ *florales, albido-lutescentes, semunciam parùm exsuperantes, longitudine inflorescentiæ, terminales lateralesque,* squamæ *subquaternæ, membranosæ, oblongæ v. ellipticæ, diutiùs persistentes, venosæ, extùs pilis subcinereis sericeo-pubescentes.* Flores 3 *ternato-fasciculati, squamis gemmaceis involucrati, cernuo-deflexi, albido-lutescentes, pallidi;* pedunculi *breves, trifidi, crassiusculi, teretes,* pedicellis *unifloris, cum corollâ articulatis.* Cor. *membranosa, infera, vix* ½ *unciæ longa, infundibuliformis;* faux *campanulata;* limbus *obsoletus, subobliquus, lobato-dentatus obtusus.* Stam. *ori tubi æquantis faucem inserta:* anth. *erectæ, terminales, breves, filamenti apicem adnato-equitantes;* pollen *granulosum, grumosum.* Germen *viride, glabrum, ovato-ellipticum, uniloculare, monospermum, æquabile;* stylus *longior staminibus, setiformis, inflexo-assurgens;* stigma *punctum simplex.* Folia *alterna lanceolato-ovalia, acuta, teneriuscula, pallidiùs virentia, subtùs villosa, infernè subangustiùs attenuata quàm supernè.*

Native of North America, from New York to Virginia, growing in shady boggy woods. Known by the name of "Leatherwood," from the nature of its stem and branches. Introduced by the Duke of Argyll in 1750. Though perfectly hardy, by no means common in our shrubberies, owing to the greediness of the Snails for the young plants, which it is difficult to defend from the attacks of this enemy. The blossom, produced long before the leaves are completely evolved, is small, but rendered conspicuous by the whitish yellow durable scales of the buds, which sur-

round it in the manner of an involucre till it decays. The species, the only one of the genus, is of the same natural order as the Common Mezereon and the Spurge-Laurel of our own country; of which the co-ordinates seem universally distinguished by the toughness of the wood. The present plant requires to be cultivated in bog-earth, and flowers about March or April.

A deciduous upright corymbosely branching shrub, seldom exceeding the height of four or five feet, *branches* numerous with a pale brown very smooth bark, somewhat tumid at their insertion, and looking as if one was let into the socket of the other. *Buds* floral, terminal and lateral; *scales* whitish yellow, a little more than half an inch long, equal to or even longer than the inflorescence, membranous, oblong, obtuse, veined, smooth within, sericeously furred without by a brownish pubescence. *Flowers* ternately fascicled, a fascicle dependent from the side of every bud, whitish yellow; *peduncles* very short, round, thickish, dividing into three one-flowered *pedicles* connected with the flower by a joint. *Calyx* none. *Corolla* membranous, inferior, less than one third of an inch in length, funnel-form; *faux* campanulate; *limb* nearly obsolete, somewhat slanted, indentedly lobed, lobes rounded. *Stamens* protruding beyond the corolla, inserted at the mouth of the tube, which is about the length of the faux and limb together: *anthers* upright, terminal, short, adnately equitant at the apex of the filament: *pollen* granular, grumous, sometimes sulphur-coloured, sometimes of as deep a yellow as that of the yolk of an egg. *Germen* green, smooth, ovately elliptical, one-celled, one-seeded: *style* longer than the stamens, setiform, white like the filaments, assurgent and variously inflectent towards the top: *stigma* a simple point. *Leaves* lanceolately oval, rather tender, pointed, villous underneath, narrowed further downwards than upwards.

The drawing was taken at the nursery of Messrs. Whitley, Brames, and Milne, Fulham.

Syd. Edwards del

Pub. by J. Ridgway & Sons 1st Jan. Piccadilly. July 1 1818

VELLA Pseudo-Cytisus.

Shrubby Cress-rocket.

TETRADYNAMIA *SILICULOSA.*

Nat. ord. CRUCIFERÆ. *Jussieu gen.* 237. *Div. II.* Fructus silicu. losus. Stylus unicus.

VELLA. Silicula ventricosa; stylo foliaceo ovato. *Cotyledones* con-duplicatæ. *Cal.* clausus. *Brown in Hort. Kew. ed.* 2. 4. 79.

Suffrutices integrifolii, aut herbæ foliis pinnatifidis. Juss. l. c. 241.

V. *Pseudo-Cytisus*, foliis integris obovatis ciliatis, siliculis erectis. *Lin. sp. pl.* 2. 895.

Vella Pseudo-Cytisus. *Mill. dict. ed.* 8. *n.* 2. *Hort. Kew.* 2. 370. *ed.* 2. 4. 79. *Cavanill. ic.* 1. 32. *t.* 42. *Lamarck ill. t.* 555. *f.* 2. *Willd. sp. pl.* 3. 422.

Pseudocytisus flore Leucoji luteo. *Bauh. pin.* 390.

Cytisi facie Alysson fruticans quorundam. *Lob. ic.* 2. 49. *Bauh. hist.* 1. 374.

Suffrutex *bipedalis v. magìs erectus, hispidus, pilis brevibus valdè ramosus, cortice fusco-pallescente.* Fol. *laxiùs sparsa, axillis ità subprolifera ut ternata sessilia ferè simulent, crassiora, duro-carnosa, spathulata laminâ ellipticâ obovatâve, pilis antrorsum inclinatis hispida, ciliata.* Racemi *terminales, multiflori, laxiùs sparsi, oblongi, cylindracei, erecti, simplices, patentes.* Pedicelli *uniflori, brevissimi, ebracteati.* Flores *lutei, erectiusculi, infra petalorum laminas sæpiùs antè emarcescentiam ustulato-purpurascentes, odori,* ⅔ *unciæ longi.* Cal. ⅓ *unciæ longus, scabro-pubescens, tubulosus, foliolis à marginibus membranaceis subcohærentibus, oblongis, obtusis.* Pet. *obcordato-spathulata,* ungue *filiformi subtriplo longiore laminâ, extra calycem convoluto,* laminâ *unicolore venosâ parvâ obcordatâ.* Stam. *omnia fertilia (nec ut vult Linnæus paribus connatis castratis), emicantia calyce;* antheris *apice replicatis.* Germ. *ovale, glabrum, compressum, anceps, subsessile:* stylus *lamellaris, oblongus, complanato-anceps, magnitudine ferè germinis cui transversus, pallido-virens,* stigmate *parvulo rotundo subbilobo pruinoso saturatè viridi præfixus.*

The parts commonly selected to distinguish the characters of generic groups, owing to a great degree of equability in the transitions of the species of the natural order to which our plant belongs, having been found to afford only faint and equivocal distinctions; it has occurred to Mr. Brown to avail himself of the seminal viscera, called cotyledons or seed-lobes, in aid of the former inefficient means. The account to which he has turned the expedient will be seen by referring to the characters in his reform of the genera of this class in the late edition of the Hortus Kewensis.

The essential marks of the present genus, are; a short ventricose pod or silicle, a broad flat oblong style, conduplicate seed-lobes and a close calyx. It consists as yet only of three species, all native of Europe. The present belongs to Spain, and is not often met with in our collections, though cultivated by Miller in 1759. Usually preserved in a pit or frame.

An upright suffrutescent plant from two to three feet high, very much branched, with a short hardish haired fur, and pale brown rind. *Leaves* loosely scattered, generally with two smaller ones in their axils, giving the appearance of their being ternate and sessile, like those of Cytisus *sessilifolius*, whence we are told the specific name was suggested, thickish hard and fleshy, spatulate with an elliptical or an obovate blade, roughly furred with the pubescence inclined forwards, ciliate. *Racemes* terminal, manyflowered, loosely and scatteredly disposed, oblong, cylindrical, upright, spreading, simple. *Pedicles* one-flowered, very short, bracteless. *Flowers* yellow, ascendent, before they decay generally turning to brownish purple below the blade of the petals, odorous, $\frac{2}{3}$ of an inch long. *Calyx* $\frac{1}{3}$ of an inch long, roughly furred, tubular, *leaflets* cohering slightly by their membranous edges, oblong, obtuse. *Petals* obcordately spatulate; *unguis* filiform, nearly 3 times longer than the lamina, convolute above the calyx; *lamina* of one colour, veiny, small, obcordate. *Stamens* all fertile (not with the two connate pairs antherless, as described by Linnæus), coming above the calyx: *anthers* recurved at the top. *Germen* oval, smooth, compressed, ancipital, subsessile: *style* laminar, oblong, in a cross direction with the germen, nearly of the same dimensions, flatly ancipital, palely green, headed by a small round somewhat bilobed frosted deep green *stigma*.

The drawing was taken in May, at the nursery of Messrs. Whitley, Brames, and Milne, Fulham.

Published by R. Ridgway, 9 Ave. Lane, Piccadilly, Feb.1 1810

VERBENA Aubletia.

Rose Vervain.

DIDYNAMIA *ANGIOSPERMIA.*

Nat. ord. VERBENACEÆ. *Jussieu in ann. du muséum.* 7. 63. *Brown prod.* 510.

VERBENA. Cal. 5-fidus. *Cor.* limbo subbilabiato 5-lobo inæquali. *Stam.* non exserta. *Stig.* obtusum. *Sem.* 2-4 nuda, calyce persistente tecta. *Juss. gen.* 109.

V. *Aubletia*, assurgens: foliis variè dissectis: spicis solitariis, pedunculatis, imbricatis, grandifloris. *Michaux bor. amer.* 2. 13.

Verbena Aubletia. *Lin. suppl.* 86. *Jacq. hort. vindob.* 2. 82. *t.* 176. *Hort. Kew.* 1. 33. *ed.* 2. 4. 41. *Curtis's magaz.* 308? *Willd. sp. pl.* 1. 119. *Pursh amer. sept.* 2. 415.

Verbena Oblætia. *Retz in act. stockholm.* 1773. 144. *t.* 5.

Verbena Obletia. *Medicus in act. palat.* 3. 194. *t.* 7.

Verbena longiflora. *Lamarck illustr.* 1. 57.

Obletia. *Rozier journ.* 1. 367. *t.* 2.

Glandularia caroliniensis. *Gmel. syst. nat.* 2. 920.

Anonymos caroliniensis. *Walt. carol.* 164.

Buchnera canadensis. *Linn. mant.* 88.

Erinus laciniatus. *Linn. sp. pl.* 2. 878.

Lychnidea verbenæ tenuifoliæ folio. *Feuillée it.* 3. 35. *t.* 25.

Radix *fibrosa perennis.* Caulis *herbaceus 4-gonus, hirsutus, infernè ramosus, ramis subprostratis ad nodos inferiores radicantibus, pedalis ultràque.* Fol. *longiùs breviùsve petiolata, opposita, per paria distantia, patentissima, hirsuta, ovato-oblonga, lobato-laciniatoque-dissecta, acuminata, subtriuncialia, immersè nervosa*, petiolum *canaliculatum angustissimè decurrentia.* Spica *numerosa, imbricata, undique sparsa, paulatìm se extendens, infrà ob citò cadentes corollas squarrosa, suprà corymboso-fastigiata;* bracteæ *subbreviores calyce hirsutæ lineari-lanceolatæ.* Cal. *glanduloso-hirsutus, tubo corollæ ½ brevior, lineari-tubulosus, plicato-pentagonus, dentibus subulatis, uno pluri-mùm minore.* Cor. *uncialis, hypocrateriformis:* tubus *duplo profundior limbo, pubescens, pallidus, in faucem 4-plo breviorem parùm ampliorem abeuns;* limbus *obliquo-rotatus*, labio uno *ultra medium 3-fido, laciniis cuneato-obcordatis, divergentibus, mediâ submajore*, labio altero ⅓ *circà minore bifido, laciniis collaterali-convergentibus.* Faux *intùs barbata, orificio pilis coronata.* Fil. *basi faucis inserta, par unum ferè obsoletum.* Germ. *oblongum, 4-sulco-4-gonum angulis obtusis:* stylus *exsertus, clavato-filiformis, suprà complanato-dilatatus:* stig. *breve, difformi-bilobum, lobo uno acuto erecto, altero crasso obtuso depresso glanduloso, basi maculâ atrovirente notato.*

The stock of this sample was imported from Carolina about seven years ago by Mr. Lyon, and has been considered in our gardens as specifically distinct from the plant of the above name, introduced from North America by Monsieur Richard in 1774, by some called perennial, by others bi-

ennial. The one before us is clearly perennial when cultivated in the conservatory, and we suspect the other will be found so under the same circumstances. We have examined the descriptions and figures, as well as indigenous and cultivated samples of *Aubletia*, and confess ourselves unable to discover such marks as in our view would justify a speculative separation in the species of the two plants. The samples vary in height, in the deeper or shallower incisions of the leaves, in the greater or less elongation of the same, as well as of the petioles. Nor can we distinguish the Chili plant of Feuillée from either. A comparison of the living subjects deemed distinct, or the difference of their duration being established by experience, may enable others to form a different opinion. We are obliged to Mr. Lambert for the opportunity of making the drawing.

Root fibrous spreading; *stem* herbaceous, 1-2 feet high or more, 4-cornered, hirsute, branching at the bottom, the branches procumbent for some distance, and often rooting at the joints. *Leaves* longly or shortly petioled, opposite, spreading, hirsute, ovately oblong, lobedly and laciniately dissected, acuminated, at most about 3 inches long, depressedly nerved and veined, very shallowly decurrent along the sides of the channelled *petiole*. *Spike* solitary, terminal, numerous, scattered, imbricated, extending itself gradually, the lower part, by the quick fall of the corolla becoming squarrose, upper part corymbosely fastigiate, the long flowers shooting up in succession round the central unopened ones. *Bractes* linearly lanceolate, hirsute, rather shorter than the calyx. *Calyx* glandularly hirsute, about $\frac{1}{3}$ shorter than the tube of the corolla, linearly tubular, plaitedly 5-cornered, teeth subulate, one much smaller than the rest. *Corolla* about an inch long hypocrateriform: *tube* twice deeper than the limb, pubescent, pale, with a slightly enlarged 4 times shorter *faux*: *limb* obliquely rotate; *one lip* 3-cleft to below the middle, segments cuneately obcordate, divergent, the middle somewhat larger, *the other lip* about $\frac{1}{3}$ smaller 2-cleft, segments collaterally convergent. *Faux* bearded within, and at the orifice. *Germen* oblong, 4-furrowed, 4-cornered with rounded corners, green: *style* clavately filiform, flattened and widened above: *stigma* short, biformly 2-lobed, one lobe pointed and upright, the other thick obtuse glandular and bent down.

MALVA capensis.

Cape Mallow.

MONADELPHIA *POLYANDRIA.*

Nat. ord. MALVACEÆ. *Jussieu gen.* 271. *Div. II.* Stam. in tubum corolliferum connata, indefinita. Fructus multicapsularis; capss. verticillatæ, in orbem dispositæ aut in unam compactæ.

MALVA. Cal. 5-fidus, calyculo cinctus 3-phyllo, rariùs 1-2-4-phyllo. *Antheræ* in apice et superficie tubi. *Stig.* 8 aut plura. *Capss.* totidem in orbem dispositæ, 1-spermæ non dehiscentes, rariùs 2-3-spermæ. *Frutices aut sæpiùs herbæ; flores axillares aut terminales.* Juss. loc. cit. 272.

Div. foliis angulosis.

M. *capensis*, caule fruticoso, foliis quinquelobis, superioribus trilobis crenato-dentatis glutinosis, floribus binis cernuis, pedunculis fructiferis erectis petiolo longioribus. *Cavan. diss.* 2. 71. *t.* 24. *f.* 3.

Malva capensis. *Lin. syst. veg. ed.* 13. 519. *Thunb. prod.* 118. *Willd. sp. pl.* 3. 782. *Hort. Kew.* 2. 448. *ed.* 2. 4. 213.

Malva africana frutescens, flore parvo carneo unguiculis atrorubentibus. *Pluk. amalth.* 140. *t.* 431. *f.* 5.

Frutex 4-*pedalis scabriùs hirsutus.* Caulis *teres, virgato-ramosissimus, erectus.* Fol. *alterna distantia, virentia, hirtiùs pubescentia, subcorrugato-venosa, cordato-subrotunda, longiora sesquiuncialia, margine subundulata, lobis apice rotundatis, lateralibus divergentibus, inferiorum sublobato-incisis, medio productiore oblongo;* petiolus *duplo vel triplo brevior, patens.* Stipulæ *geminæ, parvæ, herbaceæ, ovato-acuminatæ, ciliatæ.* Pedunculi *axillares, gemini vel solitarii, rarò biflori, filiformes, duplo v. ultrà longiores petiolis, paulò infra florem angulo obtuso flexi, stricti, erecto-patentes.* Flores *nutantes, diametro subunciali, carnei, infernè supra basin maculis radiatis puniceis picti.* Cal. exterior $\frac{1}{3}$ *brevior interiore, 4-3-phyllus, stellato-campanulatus, foliolis angustis lineari-subulatis pilosis, subcanaliculatis;* interior *semi-5fidus, stellato-pilosus, duplo v. ultra brevior corollâ, segmentis ciliatis ovato-acuminatis.* Cor. *campanulato-rotata, petalis cuneato-obcordatis, distantibus v. lateribus non tangentibus, unguiculo brevi intùs piloso.* Tubus staminеus *infrà stellato-vel penicellato-pilosus, suprà ramosus antheriferus:* anth. *parvæ, reniformes, thecis papilloso-scabris atro-sanguineis.* Styli 12? *propè stigma punicei;* stigmata *papillæ terminales glandulosæ pallidæ parùm crassiores stylo.*

Native of the Cape of Good Hope. According to the Philosophical Transactions cultivated in the Chelsea garden as long ago as 1713. Till now unrepresented by any published figure except the unsatisfactory ones we have cited from the works of Cavanilles and Pluknet. A greenhouse plant of easy culture and propagation; flowering most part of the year; seldom exceeding the height of 4 or 5 feet. More than sixty species, from humble herbs to tall shrubs,

are included in the last enumeration of this genus; the type of which is pretty generally distributed throughout the four quarters of the globe. In the tribe or order are comprised trees of the largest size, of some of which the trunk is said to be 20 or 30 feet in diameter.

Stem of the present species round, upright, roughishly furred, numerously and roddedly branched. *Leaves* alternate, distant, green, roughly and viscidly furred, veined, slightly wrinkled, nearly round, subcordate at the base, upper ones 3-lobed, lower 5-lobed, crenately toothed, the largest about an inch and a half long, slightly undulated, lobes round at the point, lateral ones divergent, middle one oblong and further extended; *petiole* two or three times shorter spreading: *stipules* 2, small, herbaceous, ovately acuminated, ciliated. *Peduncles* axillary, in pairs, sometimes solitary, rarely 2-flowered, filiform, twice longer than the petioles or more, bent in an obtuse angle a little below the flower, otherwise quite straight, uprightly spreading. *Flowers* nutant, nearly an inch in diameter, of a pale flesh colour, marked above the base with 5 radiant crimson spots. *Outer calyx* ⅓ shorter than the inner, 3-4-leaved, stellately campanulate, leaflets narrow linearly subulate slightly channelled furred; *inner one* half fivecleft, stellately furred, twice shallower or more than the corolla, segments ovately acuminated. *Corolla* campanulately rotate, *petals* cuneately obcordate, not touching at the sides, *unguis* very shortly furred within. *Stamineous tube* furred below with stellate or pencilled hairs, branching and antherbearing above; *anthers* small, reniform, with shagreened black-red cases. *Styles* 12? crimson towards the stigmas; *stigmas* so many terminal glandular whitish papillæ not much wider than the style.

The drawing was taken at the nursery of Messrs. Whitley, Brames, and Milne, Fulham.

MALVA fragrans.

Sweet-scented Mallow.

MONADELPHIA *POLYANDRIA.*

Nat. ord. MALVACEÆ. *Jussieu gen.* 271. *Div. II.* Stam. in tubum corolliferum connata, indefinita. Fructus multicapsularis; capss. verticillatæ, in orbem dispositæ aut in unam compactæ.

MALVA. Suprà fol. 295.

Div. foliis angulosis.

M. *fragrans*, caule frutescente viscoso atropurpurascente, foliis cordatis 5-7-lobatis crenatis, floribus solitariis pedunculis capillaribus folio brevioribus. *Cavan. diss.* 2. 72. *t.* 23. *f.* 3.

Malva fragrans. *Jacq. hort. vindob.* 3. 20. *t.* 33. *Thunb. prod.* 118. *Hort. Kew. ed.* 2. 4. 213. *Willd. sp. pl.* 3. 782; *(excluso synonymo Plukneti).*

M. scabrosa. *Lin. in amœn. acad.* 4. 825.

M. capensis. *γ. Lin. sp. pl.* 2. 968.

M. foliis subcordatis laciniatis hirsutis, caule arborescente. *Mill. dict. ed.* 7. *n.* 14.

M. africana frutescens flore rubro. *Comm. hort.* 2. 171. *t.* 86.

Frutex *erectus* 8-12-*pedalis viscido-hirsutus, virens, axillari-ramosus, totus odorem gratissimè balsamicum redolens.* Fol. *alterna, mollia, sesqui-3-uncialia, hirta, subrugoso-venosa, transversè longitudinem æquantia, acutè crenata, basi subcordata, lobis obtusis subsinuatis, medio ovato productiore:* petiolus 3-*plo brevior laminâ v. magìs.* Stipulæ 2, *ovato-acuminatæ, breves, patentissimæ, integerrimæ.* Pedunculi *axillares, sæpiùs binati,* 1-*flori, recti, patentissimi, filiformes, hirsuti, subbreviores folio, bis terve longiores petiolo, foliolo vel bracteâ ad basin.* Flores *carneo-purpurei, diametro infra unciale, rotato-campanulati.* Cal. exterior 3(4)-*phyllus, bis brevior interiore, foliolis lineari-lanceolatis, planis:* interior *semi-5-fidus hirsutus, segmentis ovato-acuminatis.* Pet. *non multùm profundiora calyce, collaterali-contigua, laminâ oblato-rotundâ, venosâ, margine superiore subcrenato-erosâ, basi saturatiùs rubente, ungue brevi albicante villosiusculo ciliato.* Columna staminea ¼ *circa brevior corollâ, albicans, nudiuscula v. pilis paucissimis stellatis obsita, basi maculis* 5 *puniceis ad petalorum intervalla, supernè comoso-antherifera;* antheræ *reniformes, atropurpureæ, papillis atomoideis scabræ,* polline *è granulis sphæricis lævibus cinereis grumoso-cohærentibus.* Styli (12?) *rosei, filiformes, exserti,* papillâ stigmatosâ *glandulosâ parùm crassiore pallente terminati.*

The whole of this shrub diffuses a very grateful balsamic odour, perfuming the hand for some time after it has been drawn over the plant, and rendering it one of the most desirable species of the genus for the conservatory. Native of the Cape of Good Hope. Cultivated by Miller, at Chelsea, in 1759. In bloom from April to July, and longer.

An upright leafy shrub, growing to the height of 10 or 12 feet, hirsutely and viscidly furred, green, axillarily branched. *Leaves* soft, alternate, from an inch and a half to three inches long, roughly furred, veined and slightly wrinkled, about as broad as long, sharply crenated, cordate, 5-7-lobed, lobes obtuse shallowly sinuated, the middle one ovate and longer: *petiole* 3 times shorter than the blade or more. *Stipules* 2, ovately acuminated, short, entire, spread horizontally. *Peduncles* axillary, generally double, one-flowered, outspread, straight, filiform, roughly furred, rather shorter than the leaf, 2 or 3 times longer than the petiole, generally furnished with a leaflet or bracte at the base. *Flowers* of a purplish pink, less than an inch in diameter, rotately campanulate. *Outer calyx* three-leaved, as short again as the inner one, leaflets linearly lanceolate, flat: *inner one* half5-cleft hirsute, *segments* ovately acuminated. *Petals* not much longer than the calyx, touching each other by their sides without lapping over; *lamina* or *broad part* oblately round, veined, subcrenately eroded at the upper margin, of a deeper red at the base; *unguis* short, whitish, slightly villous, ciliate. *Column of stamens* about $\frac{1}{4}$ shorter than the corolla, whitish, nearly naked, having only a few pencilled or stellated hairs, marked with 5 crimson stains between the petals at the base, bearing the anthers in a tuft at the upper part: *anthers* reniform, blackish purple, shagreened; *pollen* of smooth ash-coloured globular grains, clotted. *Styles* 12? rosy-crimson, filiform, protruded beyond the stamens; *stigma* a pale terminal glandular papilla but little wider than the style.

The drawing was taken at the nursery of Messrs. Whitley, Brames, and Milne, Fulham.

Sept. Edwards del

Published by J. Ridgway & Sons 170 Piccadilly June 1st 1813

with a

MALVA calycina.

Broad-cupped Mallow.

MONADELPHIA *POLYANDRIA.*

Nat. ord. MALVACEÆ. *Jussieu gen.* 271. *Div. II.* Stam. in tubum corolliferum connata, indefinita. Fructus multicapsularis; capss. verticillatæ, in orbem dispositæ aut in unam compactæ.

MALVA. Suprà fol. 295.

Div. Foliis subindivisis.

M. *calycina*, foliis cordatis crenatis indivisis piloso-hispidis, floribus solitariis longè pedunculatis, calyce exteriore maximo. *Cavan. diss.* 2. 81. *t.* 22. *f.* 4.

Malva calycina. *Thunb. prod.* 118. *Willd. sp. pl.* 3. 777.

Frutex *interdùm subbiorgyalis, ramosus, subviscoso-hirsutus, cortice sæpè rubescente.* Fol. *undìque sparsa, remotiuscula, cordata, virentia, parùm longiora quàm lata subsesquiuncialia v. ultra, hirsuta, rugosa, subtùs varicoso-venosa, crenato-dentata, obsoletè sinuata, suprema non adulta sublobata;* petiolus *pluriès brevior laminâ.* Stipulæ 2 *breves, ovatæ, obtusiusculæ, suprà convexæ.* Pedunculi *axillares, solitarii,* 1-*flori, longiores petiolo, hirti, foliolo ad basin stipati.* Flores *oblato-campanulati, carnei, infernè nervis puniceis radiati,* 1,$\frac{1}{2}$ *unciæ transversi.* Cal. *exterior* 3-*phyllus, æquans interiorem, foliolis ratione congenerum capensium latissimis, elliptico-ovatis, acuminatis, pube brevi hirtis;* interior *semi-5-fidus, infernè subangulosa-turbinatus, supernè campanulato-patens, segmentis lato-ovatis acuminatis acutissimis.* Pet. *rotundo-obcordata laminâ oblatâ, summo margine sinû lato obsoleto subrepando-excisa, lateribus imbricato-incumbentia, infrà lanugine minutissima ciliata; ungue brevi albo.* Tubus stamineus $\frac{1}{3}$ *brevior corollâ, basi maculis* 5 *puniceis inter petala pictus, infernè glaber albus, juxtà infra comam antherosam pilorum brevium penicillis paucis barbatus:* antheræ *nigræ reniformes,* polline *cinereo grumoso è sphærulis lævibus.* Styli (12?) *punicei, papillâ stigmatosâ glandulosâ pallidâ parùm latiore capitati.*

We suspect the reason, why we do not find this shrub among the rest of the genus recorded in the Hortus Kewensis, to be, that it has been overlooked as a variety of some of the Cape species. Plants of it from 15 to 16 feet high, with the appearance of age, are met with in our collections, and show that it is one of no very recent date in them. There is a spontaneous sample of it in the Banksian Herbarium, from the Cape of Good Hope. The specific name was suggested to Cavanilles by the leaves of the outer calyx being proportionately the broadest of any of the congeners known to him. It has never been represented by any published coloured figure before the present.

A branching subviscidly furred shrub; *bark* generally more or less red. *Leaves* scattered on all sides, standing widishly apart, cordate, green, roughly furred, but little longer than broad, an inch and a half in length or upwards, wrinkled, prominently veined underneath, crenately toothed, obsoletely sinuated, sublobate before they are full grown; *petiole* several times shorter than the blade. *Stipules* double, short, ovate, bluntish, convex on the upper side. *Peduncles* axillary, solitary, one-flowered, rough-furred, longer than the petiole, with a leaflet near their foot. *Flowers* oblately campanulate, flesh-coloured, about an inch and one third in diameter, marked below with radiated crimson streaks. *Outer calyx* equal to the inner, 3-leaved, leaflets very broad, elliptically ovate, acuminated, shortly and roughly pubescent; *inner one* half5cleft, subangularly turbinate at the lower part, at the upper spreadingly campanulate with broadly ovate sharp-pointed segments. *Petals* roundly obcordate, lamina oblate with a wide shallow subrepand nearly obsolete sinus at the top, lapping over each other at their sides, minutely ciliated below; *unguis* short, white. *Stamineous tube* about ⅓ shorter than the corolla, marked at the base of the petals, with 5 alternate crimson spots, smooth at the lower part, bearded by a few short pencils or stellated villi near the anthers: *anthers* black, reniform; *pollen* cinereous, clotted, grains sphærical smooth. *Styles* 12? crimson; *stigma* a pale glandular slightly broader papilla.

The drawing was taken from a sample in the greenhouse of Messrs. Whitley and Co. at Fulham, where it flowers for a long time in succession during the summer months.

Sygd Edwards del

Pub by J. Ridgway & Sons 170 Piccadilly July 1. 1818

GLYCINE comptoniana.

Lady Northampton's Glycine.

DIADELPHIA *DECANDRIA.*

Nat. ord. LEGUMINOSÆ. *Jussieu gen.* 345. *Div. V.* *GLYCINE.* *Suprà vol.* 3. *fol.* 261.

G. *comptoniana*, glabra; ramis teretibus margine brevissimo quandrangulatis, foliis ternatis petiolatis, foliolis oblongo-ovatis obtusissimis cum mucrone, racemis multifloris longioribus petiolo, pedicellis geminatis.

Glycine comptoniana. *Andrews's reposit.* 602.

Frutex *lignosus volubilis, ascendenti-ramosus, ramis fusco-virentibus.* Fol. *alterna, remota, subtriuncialia, obscurè viridia, reticulato-venosa, foliolis lateralibus articulo crasso flexili petiolo annexis, medio paulò majore sesquiunciam ferè longo:* petiolus *strictus, striatus, canaliculatus, articulo tumido affixus cauli:* stipulæ communes *geminæ, semiovatæ, aristato-acuminatæ, subrubentes,* partiales *minutæ, lineari-subulatæ, rubidæ.* Racemi *simplices, axillares, erecti, subbiunciales, longiores petiolo, laxiùs multiflori,* pedunculo *basi 2-bracteato, flexuoso, striato, virenti,* pedicellis *collaterali-geminis, per paria alternis, subbreviores corollâ, intervalla florum subæquantibus, angulosis, cum calyce articulatis.* Flores *violacei,* ½ *unciæ circiter longi, erectiusculi.* Cal. *subcoloratus, plùs quàm duplo brevior corollâ, tubuloso-campanulatus, bilabiatus, dorso gibbosus, margine subvillosus,* labio summo *brevè 2-fido lobulis acutis rectis,* infimo *3-fido segmentis æqualibus stellato-patentibus, acuminatis, mucronatis.* Vex. *obcordato-orbiculatum, violaceum, reflexum, medio maculâ albâ didymâ viridi pictâ insignitum, obsoletè unguiculatum:* alæ *isti æquilongæ, concolores, porrectæ, ad carinam à plano interiori appressæ, dolabriformes, ungue bifurco brevi:* car. *remota vexillo, pallida, duplo minor alis quibus conclusa, è petalis 2 falcatis obtusis, unguibus inæquali-bicruribus albis.* Fil. *diadelpha, non multùm longiora calyci, suprà cum angulo acutiori ascendentia:* anth. *chloroleucæ, ovato-subrotundæ,* polline *grumoso-granulato.* Germ. *glabrum, compresso-lineare, sessile, longitudine calycis,* stylo *brevi isoperimetro continuo incurvo terminatum;* stig. *punctum obtusum puberulum.*

In the nurseries the resemblance of the blossom of this species to that of KENNEDIA *monophylla* has raised the opinion, that it belongs to the same genus. But Mr. Brown, ever liberally communicative of his accurate and extensive information, tells us that our plant is not comprehended within the character by which that group has been defined. We have therefore left it to the genus in which it stands in the work we have cited, where it was first published. When GLYCINE undergoes a revisal, our species will probably be generically separated from it.

Native of New Holland, and, as Mr. Brown believes, of the neighbourhood of Port Jackson. Introduced some years back by Lady Northampton. The drawing was taken from a specimen kindly sent to us by Mr. Herbert, from his collection at Spofforth, near Wetherby. The plant is one that does not flower freely till of some years standing; when it is very ornamental. It does best planted in the border of a conservatory, and climbs to a considerable height.

A smooth woody twining branched shrub, branches brownish green, round, shallowly 4-cornered. *Leaves* ternate, distant, dark green, nettedly veined, about 3 inches long, leaflets oblongly ovate rounded at the top and mucronate, lateral ones fixed to the petiole by a thick flexile joint, the middle one a little the largest, about 1½ inch long; *petiole* stiff, striated, channelled, with a thick fleshy joint at the base. *Common stipules* two, semiovate, awnedly acuminated, reddish, *partial ones* minute linearly subulate, red. *Racemes* simple, axillary, manyflowered, longer than the petiole, upright, two inches or more in length, *peduncle* flexuose, striated, green, with 2 bractes at the base, *pedicles* in alternate pairs, rather shorter than the corolla, about equal to the intervals between the pairs, angular, connected by a joint with the calyx. *Flowers* violet purple, about half an inch long. *Calyx* coloured, more than twice shorter than the corolla, tubularly campanulate, 2-lipped, gibbous at the back, slightly villous at the edge, *upper lip* shortly 2-cleft, with acute straight lobules, *lower one* 3-cleft, with stellately spread equal acuminated mucronate segments. *Vexillum* obcordately orbicular, reflectent, with a white double green-figured spot in the middle, obsoletely unguiculate: *wings* equal in length to this, of one colour, pointing forwards, pressed to the keel by their inner flat surface, hatchet-shaped, with a short bifurcated unguis: *keel* diverging from the vexillum, pale, twice smaller than the wings, of two falcate obtuse petals, with white unequally two-pronged ungues. *Filaments* diadelphous, not much longer than the calyx, turned up with a sharpish angle: *anthers* greenish yellow, ovately round; *pollen* granular and clotted. *Germen* smooth, compressedly linear, sessile, the length of the calyx, terminated by a short continuous *style* of nearly the same thickness; *stigma* an obtuse slightly pubescent point.

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Pub by J. Bridgman & Son 121 S. Audley. July 1 1815

VESTIA lycioides.

Box-thornlike Vestia.

PENTANDRIA *MONOGYNIA.*

Nat. ord. SOLANEÆ. *Jussieu gen.* 124. *Brown prod.* 449.

VESTIA. Cal. campanulatus, 5-dentatus. *Cor.* tubuloso-campanulata. *Stig.* capitatum. *Caps.* 4-valvis. *Sem.* nuda. *Willd. enum.* 208.

Vestia lycioides. *Willd. enum.* 208.

Frutex *graveolens, erectus, ramosus, ramis copiosè foliosis, teretibus, villosis.* Fol. *alternè sparsa, approximata, oblongo-ovalia, glabra, integra, subsessilia v. brevissimè subpetiolata, patentia, suprà nitida, longiora sesquiuncialia.* Pedunculi *laterales, altiùs axillis extra lineam foliorum positi, solitarii,* 1-2-*flori, erecti, teretes villosi, modò bracteâ vagâ stipati,* $\frac{2}{3}$ *unciæ longi, non multùm infra calycem articulati.* Cal. *opaco-membranaceus, inferus,* 3-*plo brevior corollâ, cupulato-tubulosus, pallidè virescens* 5-*nervis, margine sinuato-*5-*dentatus lanuginosus.* Cor. *monopetala, pallidè lutescens, elongato-tubulosa, unciam exsuperans;* tubus *calyci æqualis;* faux *cylindrica, sublatior tubo, infernè obsoletè* 5-*gona;* limbus 5-*partitus, fauce* 3-*plo brevior, stellato-expansus, æqualis, extùs tomentosus,* lac. *angulato-ovatis, acutis.* Fil. *longiùs exserta, subæqualia, apicibus conniventia, capillaria, ore tubi infra faucem inserta, basi dilatatâ albo-lanata:* anth. *fuscæ, sagittato-cordatæ, breves, biloculares à furcâ baseos infixæ, versatiles, utrinque longitudinaliter dehiscentes, loculis defloratis peltato-orbiculatis.* Germ. *rotundum, suturis* 4 *supernè notatum, virens, polyspermum, biloculare, receptaculis* 2 *placentaribus dissepimento utrinque adnatis,* ovulis *globosis:* stylus *filiformis, virescens, filamentis æquilongus, at* 3-*plo crassior, erectus, summo germinis umbilico insertus;* stig. *continuum, parùm crassius, obtusum, vix capitatum.*

A genus instituted by Willdenow from the present species, which he suspects to be the same with the PERIPHRAGMOS *fœtidus* of the Flora Peruviana. The two plants plainly coincide in some remarkable characteristics; but still, if we are to put faith in figures and descriptions, they can scarcely be the same species. The plant of the Flora Peruviana has 3-flowered peduncles, which terminate branchlets that issue from a separate fascicle of small leaves, in our plant these proceed nakedly from the side of the main branches out of the line of and above the axil of the proximate leaf, and have generally only one flower. The calyx is there described as of a black violet colour, and the limb of the corolla as pale violet, neither of which circumstances applies to this plant. The seed-vessel shown in the plate of the above work would remove all perplexity, for that never could belong to our species; but then it is questioned by Willdenow whether this

is not a wrong one, introduced there by mistake. We confess our persuasion of their being distinct. On Mr. Brown's suggestion we have placed the genus in the order *Solaneæ*. It comes very close to LYCIUM.

We are obliged to Mr. Lambert for the opportunity of taking the drawing, from a sample that came from the hothouse at Boyton, his seat in Wiltshire.

Native of South America. Very lately introduced into the Physic Garden at Chelsea, from Berlin; where it had most probably been raised from seed brought home by Messrs. Humboldt and Bonpland.

An upright branching rank-smelling shrub; branches copiously leaved, round, villous. *Leaves* scattered, near, oblongly oval, smooth, entire, subsessile or very shortly subpetioled, outspread, longer ones $1\frac{1}{2}$ or 2 inches in length, rather glossy at the upper side. *Peduncles* lateral, placed above and out of the direction of the axil of the leaf, ascendent, 1-2-flowered, round, villous, $\frac{2}{3}$ of an inch long, jointed a little below the calyx. *Calyx* inferior, 3 times shorter than the corolla, tubularly cupshaped, 5-nerved, with a sinuated 5-toothed downy edge. *Corolla* of one piece, pale yellow, elongatedly tubular, more than an inch long; *tube* equal to the calyx; *faux* cylindrical, rather wider than the tube, obsoletely pentagonal below; *limb* 3 times shorter than the faux, even, stellated, tomentosely villous, without segments, angularly ovate, acute. *Filaments* longly protruded, nearly equal, connivent above, capillary, inserted below the faux at the mouth of the tube, widened at the base and bearded with a white wool: *anthers* brown, sagittately cordate, didymously locular, fixed at the notch in their base to the point of the filament, loculaments, when the pollen has been voided, of a round peltate form. *Style* as long as the filaments, 3 times thicker, greenish, inserted at the umbilicated summit of the germen; *stigma* deep green, obtuse obsoletely indented. *Germen* round, marked above with 4 seams, green, many-seeded, bilocular, with two placentiform receptacles, one grown to each side of the dissepiment; *ovula* globular.

INDIGOFERA amœna,
Long-bunched Indigo,

DIADELPHIA *DECANDRIA.*

Nat. ord. LEGUMINOSÆ. *Jussieu gen.* 345, *Div. V, INDIGOFERA. Suprà in notis appendicis vol.* 3.

I. *amœna*, foliis ternatis ovalibus pilosiusculis, ramis teretibus, spicis pedunculatis, stipulis setaceis, calycibus laxis, caule frutescente. *Hort. Kew.* 3. 68.

Indigofera amœna. *Jacq. hort. schœnb.* 2. 57. *t.* 234. *Hort. Kew. ed.* 2. 4. 351. *Willd. sp. pl.* 3. 1224.

Frutex *brachialis et ultrà, ramosus, erectus, setulis decumbentibus hispidocanescens;* rami *flexuosi quadranguloso-marginati.* Fol. *alterna, remota, patentissima, subtùs densiùs pubescentia;* foliolis *oblongo-ovalibus, vix uncialibus, subæqualibus, mucrone recurvo, nervis præter medium principem obsolescentibus:* petiolus *subbrevior foliolis, cum ramo articulatus ac foliola cum illo:* stipulæ 2, *herbaceæ, subulato-aristatæ, hispidæ, caducæ.* Pedunculi *axillares, solitarii, erecti, spicatìm racemosi, pluriès longiores folio;* floribus *numerosis, sparsis, approximatis, patentissimis, subsemuncialibus, roseo-purpurascentibus;* pedicellis *hispidis, brevissimis, cum calyce continuis;* bracteis *caducis, subæquantibus calycem, subcoloratis, punctatis, laminâ compresso-fornicatâ aristato-acuminatâ pede brevi viridi positâ.* Cal. *hispidus, coloratus, campanulatus, transversè latior, subtriplo brevior corollâ, semi5fidus, limbo 2-labiato, segmentis inæqualibus ciliatis lineari-subulatis,* labii summi *divaricatis deorsùm obliquatis,* labii imi *pectinato-collateralibus, medio majore.* Pet. *concolora, venosa, subæquilonga:* vex. *oblongum, rhombeo-ovatum, subacuminatum, de infra medium refractum,* ungue *lato, rubro, concavo non tecto calyce, dorso bigibbo,* laminâ *ad pedem notatâ maculâ didymâ albo et violaceo striatâ:* alæ *falcato-lanceolatæ, divaricatæ, acumine lanuginoso, ungue simplici:* car. *deflexa, lanceolato-navicularis, utrinque mucronato-calcarata, unguibus simplicibus oblongis divergentibus rubris.* Stam. *diadelpha: tubus filamentosus brevissimè 9-fidus, suprà rubescens, apice incurvus:* anth. *erectæ, ovatæ, apiculo posticè cristato, barbâ albâ tomentosâ ad basin.* Germ. *teres, villosum, rectum;* stylus *bis brevior v. magìs, tereti-subulatus, rubescens, incurvus;* stig. *glanduloso-capitatum, subcompressum, album.*

This pretty species does not seem to have been recognised of late in our collections for the INDIGOFERA *amœna*, which it clearly is. In all the gardens where we have met with it, it has been known by the appellation of INDIGOFERA *purpurea*. Belongs to the Cape of Good Hope; and was introduced in 1774 by Mr. Masson. A free-flowering greenhouse plant.

A grey branching upright shrub, with a short hispid flat-pressed silvery fur, in the samples we have seen, seldom

exceeding a yard in height; *branches* flexuose, 4-ridged; the small bristles that form the fur are decumbent and fixed down at their middle with the two ends pointed and detached, as we see them on a larger scale in MALPIGHIA. *Leaves* alternate, wideset, widespread, with a thicker fur underneath; *leaflets* oblongly oval, scarcely an inch long, nearly equal, with a small recurved point, nerves, excepting the main one, very faintly marked: *petiole* usually shorter than the leaflets, fixed to the branch by a joint, as the leaflets are to that: *stipules* 2, herbaceous, subulate, awned, caducous. *Peduncles* axillary, solitary, upright, several times longer than the leaves; *flowers* numerous, in a spike-like raceme, scattered, near together, widespread, about half an inch long, purplish red; *pedicles* very short; *bractes* caducous, about equal to the calyx, coloured in part, spotted, formed of a compressedly vaulted awned lamina and a short green unguis. *Calyx* hispid, coloured, oblately campanulate, about 3 times shorter than the corolla, half5cleft; *limb* bilabiate, segments unequal, linearly subulate, ciliate, in the *upper lip* divaricate and slanted downwards, in the *lower* placed parallelly like the teeth of a comb, the middle one largest. *Petals* all of the same colour, veined, nearly of one length: *vexillum* oblong, rhomboidally ovate, slightly acuminate, refracted from below the middle, *unguis* red, broad, concave, gibbous at the back, not covered by the calyx, *lamina* with a double white and violet streaked spot at the base: *wings* falcately lanceolate, divaricate, downy at the point, *unguis* simple: *keel* deflected, lanceolately navicular, with a short-pointed spur at each side: *ungues* simple, oblong, divergent, red. *Stamens* diadelphous: the tube of the filaments very shallowly 9-cleft, reddish and incurved at the top: *anthers* upright, ovate, with a small crested point at the back, tomentosely bearded at the base. *Germen* round, villous, straight: *style* as short again as that, subulate, reddish, incurved: *stigma* a white compressed glandular head.

The drawing was taken at Messrs. Whitley and Co.'s, Fulham.

VINCA herbacea.

Hungarian Periwinkle.

PENTANDRIA *MONOGYNIA.*

Nat. ord. APOCYNEÆ. *Jussieu gen.* 143. *Div. I.* Germen duplex. Fructus bifollicularis. Semina non papposa.

VINCA. (Contorta). *Cal.* 5-partitus persistens. *Cor.* hypocrateriformis tubo longo, fauce 5-gonâ, limbo plano obtusè 5-lobo. *Anth.* membranaceæ. *Stylus* 1; *stig.* urceolatum et subtùs peltato-orbiculatum. *Folliculi* erecti conniventes oblongi angusti; *sem.* oblonga, nuda. *Suffrutices (rariùs herbæ), quidam non lactescentes, quidam caulibus diffusis; fol. opposita; flores axillares.* Juss. l. c. 144.

V. *herbacea*, caulibus herbaceis prostratis; foliis oblongo-lanceolatis glabris, floribus pedunculatis, calyce ciliato. *Willd. enum.* 274.

Vinca herbacea. *Waldst. et Kitaib. hung.* 1. 8. *t.* 9. *Persoon syn.* 1. 267.

Radix *perennis.* Caules *herbacei procumbentes, in solo arenoso prostrati, lineâ rectâ ad* $1\frac{1}{2}$-2 *pedes protendendi, nec nisi in graminosis à rectâ directione deflectendi atque apice erigendi, iidem floriferi et radicantes (nec ut in* VINCÀ majore *et* minore *florentes erecti, non florentes procumbentes), simplicissimi, rarò ramosi ramis oppositis altero breviore, nudi, læves, nitidi, et velut atomis quibusdam sub epidermide aspersi, non rarò purpurascentes, subquadranguli angulis à petiolorum margine utrinque decurrentibus, lateribus 2 majoribus convexis, minoribus subcanaliculatis.* Fol. *subsessilia, opposita, obtusa, suprà obscurè viridia, nitida, subtùs pallidiora, utrinque nuda, marginibus tamen subrevolutis ciliata setulis brevissimis rigidiusculis, infima nonnunquam subrotunda, proxima ovata, oblongo-ovata, tandèm lanceolata, omnia hyeme emorientia.* Flores 4-5 *in eodem caule, sustentati pedunculis erectis axillaribus, rarò oppositis, folia æquantibus v. superantibus, teretibus v. subcompressis, post florescentiam recurvandis.* Cal. *(subcoloratus)* 5-*partitus, erectus, persistens,* lac. *(distantibus) acutis, subciliatis, basi utrinque glandulâ dentatis.* Cor. *congenerum, violaceo-cærulea (subsesquiunciam transversa), nonnunquàm candida, tubi parte angustiore sulcis* 5 *profundioribus insculpta, fauce hirsutâ, pilis albis clausâ.* Fil. *ubi corollæ adnascuntur hirsuta, hinc prominentia, glabra, albida, versùs antheras dilatata.* Anth. *luteæ, extùs versùs apicem hirsutæ, medio utrinque laminâ membranaceâ auctæ.* Germ. 2 *ovata, interjectâ utrinque glandulâ melliferâ ovatâ viridiluteâ.* Styli *albi.* Stig. *(albo-lanatum).* Folliculi 2 *subcylindrici, medio nonnunquam angustati, subangulati, versùs apicem tenuiores, alter sæpè abortiens.* Sem. *oblonga, hìnc convexa, indè foveâ longitudinali excavata.* Wald. & Kit. l. c.

The species is native of Hungary, and was first recorded by Messrs. Waldstein and Kitaibel in their splendid work on the rarer plants of that kingdom. It differs in several points from its well-known congeners *major* and *minor*; most decisively however in not having a suffrutescent evergreen stem, but one that dies in the winter. The drawing

was taken at the nursery of Messrs. Whitley and Co. Fulham, where it has been very recently received from the Botanic Garden of Berlin. It is perfectly hardy, and flowers in May and June.

Root perennial. *Stems* herbaceous, procumbent, radicant, from a foot and a half to two feet long, quite simple, seldom branched, smooth, frequently purplish, slightly 4-cornered. *Leaves* subsessile, opposite, obtuse, dark green above, subrevolute at the edge, very shortly and bristly ciliate, the lowermost nearly round, the next ovate, then oblongly ovate, and lastly lanceolate. *Flowers* 4-5 upon a stem; *peduncles* solitary, axillary, seldom opposite, upright, equal to the leaves or longer, round or slightly compressed, recurved after the flower has faded. *Calyx* slightly coloured, 5-parted, upright, persistent, *segments* wideset, acute, minutely ciliate, toothed on each side the base by a small gland. *Corolla* like that of the congeners, about an inch and half across, varying from a deep violet purple to white, deepishly five-furrowed at the narrow part of the tube, faux closed by a white pubescence. *Filaments* hirsute where they join to the corolla, prominent on one side, smooth, white, dilated towards the anthers. *Anthers* yellow hirsutely furred at the top without, having a membranous lamina on each side their middle. *Germens* 2, ovate, intercepted on each side by a yellow green melliferous gland. *Styles* white. *Stigmas* white-woolled. *Follicles* 2, sometimes narrowed in the middle, subangular, narrower towards the top, one of them often miscarrying. *Seeds* oblong, convex on one side, with a longitudinal cavity on the other.

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Pubd by J. Ridgway & Son 170 Piccadilly. May 1. 1818.

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VACCINIUM fuscatum.

Cluster-flowered Whortle-berry.

OCTANDRIA (DECANDRIA. *Pursh.*) *MONOGYNIA.*

Nat. ord. ERICÆ. *Jussieu gen.* 159. *Div. II.* Germen inferum aut seminiferum.

ERICEÆ. *Brown prod.* 557.

VACCINIUM. Cal. superus 4-(5-) dentatus aut integer. *Cor.* campanulata 4-(5-) fida laciniis reflexis (4-partita omninò reflexa in *Oxycocco*). *Stam.* non epipetala, quandoque exserta; *anth.* bicornes & dorso 2-aristatæ. *Germ.* inferum. *Bacca* parva, infera, globosa, umbilicata, 4-loc., oligosperma. *Frutices, squamis gemmarum sæpè persistentibus in ramulorum basi; fol. alterna, in quibusdam sempervirentia; flores pedicellati, solitarii, axillares, v. plurimi terminales bracteati, interdùm 5-fidi, 10-andri.* Juss. l. c. 162.

Div. foliis annotinis seu deciduis.

V. *fuscatum*, foliis oblongis acutis serrulatis glabris, racemis aggregatis terminalibus corymbosis bracteatis, pedicellis longis nutantibus, corollis cylindraceis, laciniis erectis brevibus, calycibus acutis erectis, stylo subexserto. *Pursh amer. sept.* 1. 287.

Vaccinium fuscatum. *Hort. Kew.* 2. 11. *ed.* 2. 2. 356. *Willd. sp. pl.* 2. 351.

Vaccinium formosum. *Andrews's reposit.* 97.

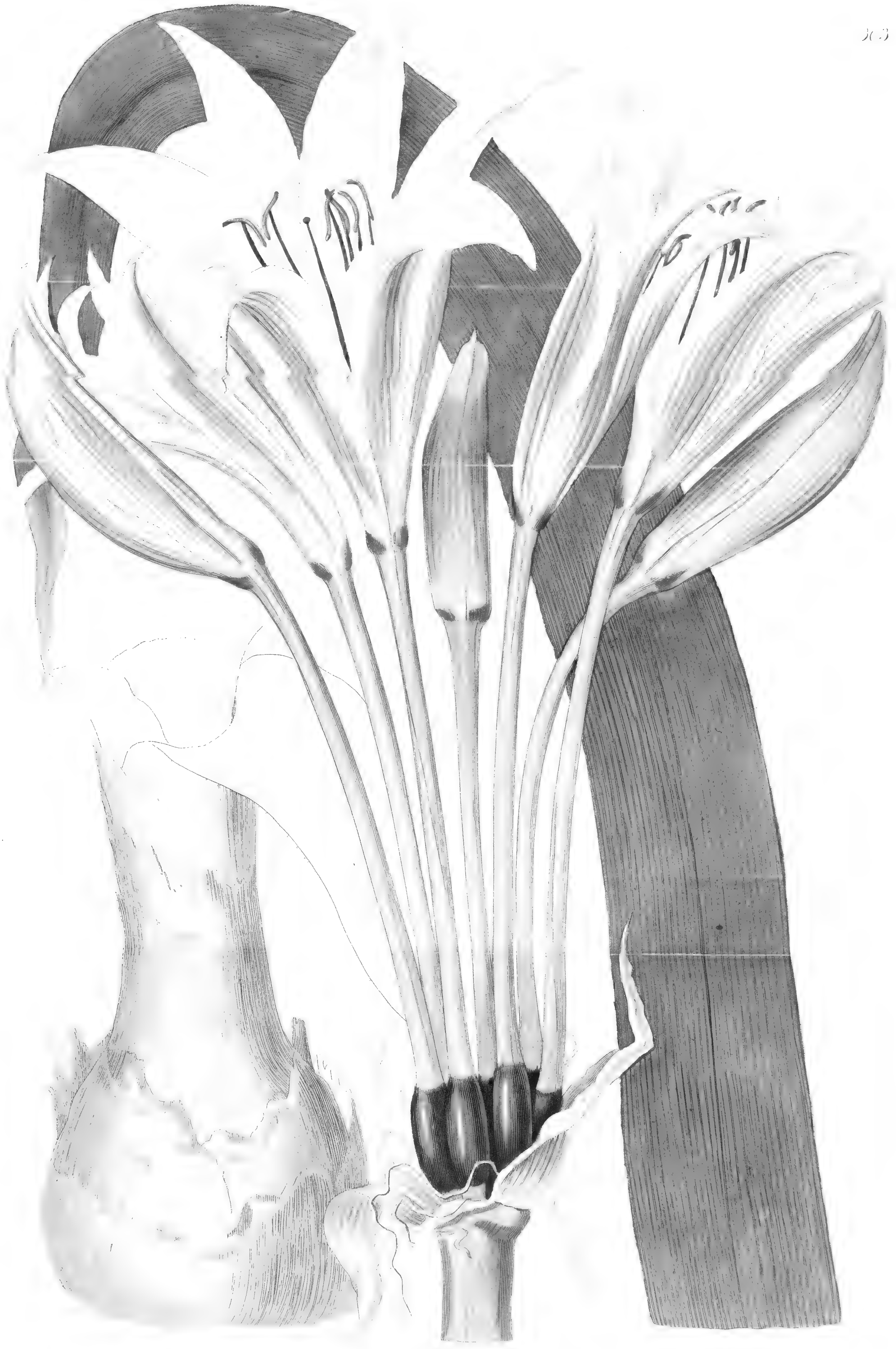
Frutex 2-3-*pedalis, flexuoso-ramosus.* Fol. *decidua, oblonga, elliptica, sublanceolata, acuta, subtilitèr serrulata, venis subtùs villosiuscula, subsesquiuncialia, semunciam lata vel ultrà.* Racemi *compositi, oblongo-paniculati in ramulis subaphyllis flexuosis;* partiales *gemmacei pluriflori laterales et terminales, alterni, subcorymboso-contracti,* pedunculo *stricto haud multùm longiore pedicellis;* pedicelli *lucidi, viridi-rubentes, nutantes, longitudine fermè corollæ, supra basin bracteati,* bracteis *membranaceis, rubris, lanceolatis, caducis, margine lanuginoso-ciliatis.* Flores *albi, roseo-vittati, odorem melleum redolentes.* Cal. *brevis, oblato-campanulatus, 5-fidus, lobulis acutiùs ovatis subciliatis apice recurvis.* Cor. *ovato-cylindracea, diametro 3plo v. ultrà breviore longitudine, suprà subplicato-angulosa, ore angusto 5-fido, lacinulis brevissimis acutulis margine villosiusculis.* Stam. 10, ½ *breviora corollâ, erecta:* fil. *cylindraceo-contigua, alba, plana, linearia, longitudine antherarum, pilosa:* anth. *ferrugineæ, loculis basi muticis, aristis præfixis longioribus ipsis.* Stylus *virescens, teres, strictus, subexsertus:* stig. *papilloso-capitatum.*

Twenty-five North-American species of this genus have been recorded by Mr. Pursh in the work we have cited; among which the present little shrub is the most ornamental in point of blossom. It is said to grow naturally in the swamps of Lower Carolina and Georgia. Was first introduced in 1770 by Mr. William Young. The specific name of *fus-*

catum refers to the colour of the calyx. The drawing was made at the nursery of Messrs. Whitley and Co. at Fulham, where the plant is cultivated in the open ground in bog-earth. It flowers in May and June.

A flexuosely branching deciduous shrub, seldom exceeding 2 or 3 feet in height. *Leaves* oblong, elliptical, sublanceolate, pointed, very finely serrate, about an inch and half long, about the half of one broad or more, slightly villous underneath along the veins. *Racemes* compound, in oblong flexuose subleafless panicles; *partial ones* several-flowered, lateral and terminal, alternate, contracted to nearly a corymbose form; *peduncle* straight, stiff, not much longer than the pedicles, generally with a scale or two of the floral bud remaining at the base; *pedicles* reddish, shining, deflected, nearly of the length of the corolla, furnished above the base with red membranous lanceolate downy-edged caducous *bractes*. *Flowers* white and red, smelling like honey. *Calyx* continuous with the germen, short, oblately campanulate, 5-cleft, lobules pointedly ovate, slightly ciliate, recurved at the tip. *Corolla* ovately cylindrical, the diameter three times less than the length or more, plaitedly angular at the upper part, *mouth* narrow, 5-cleft, *segments* minute, somewhat pointed, slightly villous at the edge. *Stamens* 10, a third shorter than the corolla, upright: *filaments* cylindrically contiguous, white, flat, linear, furred, the length of the anthers: *anthers* of the colour of rust, without any appendage at the base, headed by two awns longer than the cells. *Style* green, round, straight, nearly protruded from the mouth of the corolla; *stigma* capitate, papulous.

The principal distinctions between VACCINIUM (which varies with 8 and 10 stamens) and ANDROMEDA, are the berry of the first, and the capsule of the latter.



AMARYLLIS longifolia; γ. *longiflora.*

Tall-flowered long-leaved Amaryllis.

HEXANDRIA *MONOGYNIA.*

Nat. ord. NARCISSI. *Jussieu gen.* 54. *Div. II.*
AMARYLLIDEÆ. *Brown prod.* 296. *Sect. I.*
AMARYLLIS. Suprà vol. 3. *fol.* 226.

Div. Bulbispermæ. Foliis multifariis.

A. *longifolia*, umbella multiflora, brevitèr et obesè pedicellata; foliis lorato-attenuatis margine scabris: limbo suberecto subduplo breviore tubo. *Nobis in journ. of science and the arts.* 2. 366.

Amaryllis longifolia. *L'Herit. sert. angl.* 13. *Hort. Kew.* 1. 419. *ed.* 2. 2. 227. *Jacq. ic. rar.* 2. 364. *coll.* 4. 205. *fragm.* 3. *t.* 2. *fig.* 1. *Nobis in Curtis's magaz.* 661. *Redouté liliac.* 347. *Willd. sp. pl.* 2. 56; *(exclusis undìque Linnæo autoribusque ab eo citatis,* BRUNSVIGIAM falcatam *intelligentibus).*

Amaryllis bulbisperma. *Burm. prod.* 9.

Amaryllis capensis. *Mill. dict. ed.* 8. *n.* 12.

(α) *minor;* bulbo angusto cylindrico; foliis glaucis; germine subrotundo-elliptico colorato.

Amaryllis riparia. *Burchell MSS.*

(β) *major;* foliis glaucis; germine oblongo, viridi, rotundatè 3-lobo. *Curtis's magaz. loc. cit.*

(γ) *maxima*; foliis non glaucis, strictioribus, germine oblongo lucido absque omni sulco v. gibbositate.

Bulbus *oblongus, integumentis fuscis.* Fol. *plura, multifariàm recurvanda, infernè invicèm convoluto-vaginantia, longiora scapo, interiora angustiora erectiora canaliculata.* Scapus *sesqui-bipedalis* v. *ultrà, teres, obsoletissimè anceps, solidus, glaucus.* Spatha *bivalvis, arida, acuminata, triplo brevior umbellâ.* Flores 6-8, 6-9-*unciales, incarnati, odori;* pedicelli *germinum subisoperimetri.* Corollæ tubus *linearis, obtusè* 3-*gonus, nunc curvatus, referens pedunculum, ore nudo:* limbus *turbinato-campanulatus, subsemiringens, ad basin usque* 6-*partitus, duplo ferè brevior tubo, laciniis ovali-oblongis,* 3 *exterioribus latioribus apiculo hamato.* Fil. *punicea, inclinata,* ⅓ *fermè breviora limbo:* anth. *vibratæ, vacuæ lunatæ, polline sulphureo.* Stylus *gracilis puniceo-purpurascens:* stig. *depresso-capitatum, subtrigonum, pruinosum.* Caps. *bulbisperma.*

The plant which has afforded our drawing was received by Mr. Griffin from a garden in Jamaica, without notice of its being or not being indigenous of that Island. Were it native of those parts, we should have had no hesitation in deeming it distinct from the Cape species, under the name of which it is here published. It differs in having a firmer more upright and in no way glaucous foliage, a full third longer flowers, and a bright green furrowless germen.

Mr. Griffin thinks that the bulbs of the two are different. But as the distinctions we observed, were such as we conceive to be within the scope of both seminal variation and exotic culture, we think it safer to record the plant as a distinguished variety of the present species, than to separate it by a new name, before either the permanence of the differences has been proved, or its original abode ascertained.

The drawing was taken in May last, at Mr. Griffin's, at South Lambeth, where the plant flowered in the hothouse. There are other specimens of it both in the Cambridge and Liverpool botanic gardens.

Bulb oblong, with dark brown membranous integuments. *Leaves* several, in different directions, recurved, convolutely sheathing below, longer than the flower-stem, inner ones narrower, more upright, sharply channelled. *Flowerstem* from a foot and a half to two feet high or more, round, very faintly and bluntly two-edged, glaucous, solid. *Spathe* two-valved, dry, acuminate, twice shorter than the umbel. *Flowers* 6-8, from 6 to 9 inches long, rose-coloured and white, sweet-scented: *peduncles* very short, nearly as thick as the germen. *Tube of the corolla* linear, obtusely 3-cornered, sometimes curved, resembling a peduncle, smooth at the orifice: *limb* turbinately campanulate, slightly semiringent, sixparted quite to the base, nearly twice shorter than the tube, segments ovally oblong, three outer ones the broadest, with a hooked point. *Filaments* crimson, inclined, about a third shorter than the limb: *anthers* balanced, when the pollen is evacuated curved like a crescent: *pollen* sulphur-coloured. *Style* very slender, crimson; *stigma* depressedly headed, slightly triangular, subpubescent, *Capsule* bulbispermous.

CACTUS speciosus.

Rose-flowered Indian-Fig.

ICOSANDRIA *MONOGYNIA.*

Nat. ord. CACTI. *Jussieu gen.* 310. *Div. II.*
CACTUS. Suprà vol. 2. *fol.* 137.

Div. Phyllanthi.

C. *speciosus*, caulibus articulatis, compressis, foliaceis, serrato-repandis; floribus magnis tubo inermi, squamuloso. *Bonpland nav. et malmais.* 8. *t.* 3; *(non verò Willdenovii in suppl. enum. hort. berol., cujus planta est* CACTUS speciosissimus. *Mém. du muséum.* 3. 190. *t.* 9.)
Cactus speciosus. *Desfont. tabl.* 191.

Frutescens. Caulis *articulatus, ramosus, lætè virescens, subnudus, carnosus, marginibus crenato-excisus, ex cylindraceo sæpèque subangulari cum crassitudine pennæ scriptoriæ in laminam foliaceam oblongam latitudine sesquibiunciali longitudine plùs minùs sesunciali extenuatus, nervo medio alios parallelos utrinque emittente percursus, imo crenarum sinû armatus fasciculis spinularum minutarum lanugine albicante cinctus vix oculis nudis manifestis.* Flores *in crenis caulinis solitarii, quadriunciales, infundibuliformes, curvuli, extùs squarroso-recurvi, intùs tubuloso-convergentes.* Germ. *oblongum, pluriès brevius tubo calycis.* Cal. *oblongus, cylindricus, tubo pallidè virente, squamis àtropurpureis reflexis munito, breviore segmentis limbi.* Cor. *lætè rosea, sublongior calyce;* pet. *elongato-oblonga, apice mucronata, intima in campanam tubuloso-oblongam conniventia.* Stam. *numerosa æquantia corollam:* fil. *subcapillaria, tenera, alba.* Stylus *æqualis staminibus, filiformis.* Stig. 5 *v.* 7.

This beautifully blossomed and curious plant was first observed by Messrs. Humboldt and Bonpland during their memorable travels in South America. They met with it, in 1801, growing wild near the village of Turbaco, situated a few leagues to the south of Carthagena, at the elevation of 126 fathoms. The species belongs to a section distinguished in the genus by a thinner flesh, less substantial yet succulent stems, the articulations of which are extended into the form of flat elongated leaves, are nearly free from the thorny pencils that beset the surface of the rest and largely indented at the margin. It differs in its own section of the genus, from *alatus* in not having a small greenish white flower, and from *Phyllanthus* in not having a long slender white one.

The drawing was taken last June, in the conservatory of Mrs. Gilbert, at Earl's Court, where the plant had been received from France the year before. The first time it

bloomed in Europe was in 1811, near Paris, in the garden of La Malmaison, then belonging to the Empress Josephine. It was supposed to have been raised from seed brought home by the celebrated travellers, by whom we have already said the species was first observed.

Stem shrubby, jointed, branching, of a clear soft green colour, nearly smooth, fleshy, largely and crenately indented at the edge, from cylindrical and often sub-angular with the thickness of a common pen, dilated into an oblong foliaceous lamina, from an inch and a half to two inches in breadth and about six in length, traversed longitudinally by a midrib branching into parallel side-nerves, armed at the angles of the indentations with pencils of minute prickles scarcely visible to the naked eye and imbedded in short white wool. *Flowers* in the indentations of the branches, solitary, 4 inches long, funnelform, slightly curved, squarrosely patent without, within converging cylindrically. *Germen* oblong, several times shorter than the tube of the calyx. *Calyx* oblong, cylindrical, with a pale green tube beset with blackish purple reflected scales and shorter than the segments of the limb. *Corolla* of a fine rose-colour, a little longer than the calyx; *petals* elongatedly oblong, with a small point at the end, inner ones tubularly campanulate. *Stamens* numerous, equal to the corolla: *filaments* of an almost capillary fineness, tender, white. *Style* equal to the stamens, filiform. *Stigmas* 5 or 7.

Pl. L. of Pickering & Inst.t of D. Piccadilly Aug.t 1.1818

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ORNITHOGALUM thyrsoides; β. *flavescens.*

Pale yellow thyrse-flowering Star-of-Bethlehem.

HEXANDRIA *MONOGYNIA.*

Nat. ord. ASPHODELI. *Jussieu gen.* 53.
ASPHODELEÆ. *Brown prod.* 274.
ORNITHOGALUM. Suprà vol. 2. *fol.* 158.

O. *thyrsoides*, corymbis multifloris racemiformibus, filamentis alternis furcatis, foliis lanceolatis. *Hort. Kew.* 1. 442.
Ornithogalum thyrsoides. *Jacq. hort. vindob.* 3. 17. *t.* 28; *(mala). Syst. veg. Murr.* 328. *Thunb. prod.* 62. *Curtis's magaz.* 1164. *Hort. Kew. ed.* 2. 2. 261. *Redouté liliac.* 333. *Willd. sp. pl.* 2. 124; (quoad β.)
Ornithogalum arabicum. *Redouté liliac.* 63; *(nec aliorum licèt malè pro eo in edit. secundâ Hort. Kew. citatum sit).*
Ornithogalum æthiopicum. *Clus. cur. post.* 21. *Park. par.* 138.
(β)floribus nondum apertis aurantiis, indè albo-flavescentibus.
Ornithogalum aureum. γ. *Willd. sp. pl.* 2. 124.
Ornithogalum flavescens. *Jacq. ic. rar.* 2. *t.* 437. *coll.* 3. 233.

Bulbus *tunicatus, subrotundus.* Fol. *plura* (6?) *ambientia, recurvo-recumbentia, lorato-acuminata, planiuscula, lucida, lanugine subtili ciliata, sub5uncialia, basi convoluto-complexa.* Scapus *teres, glaucus, sesquipedalis v. ultrà, flexuoso-erectus.* Racemus *multiflorus, corymboso-fastigians, semipedalis v. ultrà, primò aurantius indè flavo-pallescens.* Bracteæ *singulares, convoluto-ovatæ cuspide elongatâ, duplo v. ultrà breviores pedicellis subsesquiuncialibus.* Cor. *rotato-campanulata, citiùs post anthesin connivens, nec unquàm explanata, vix sesquiunciam transversa;* laciniis *elliptico-oblongis, subæqualibus, concavis, utrinque invicèm imbricato-contiguis.* Stam. 3-*plo breviora corollâ, erecto-patentia, suprà incurvata, cinerascentia;* fil. *subulata, infernè alata, alis alternorum latioribus profundioribus et utrinque unidentatis dentibus conniventibus.* Germ. *cinerascens, oblongum, obtusè trigonum, subsexsulcum;* stylus *continuus, brevis, crassiusculus, triqueter:* stigma *trilobo-capitatum, puberulum, brevius stylo.*

Native of the Cape of Good Hope. Differs from *aureum* in having segments of the corolla that lap over each other at the sides, and with ends more shortly pointed; from *revolutum* in having the same not divaricately outspread, and with sides which do not become revolute; from *lacteum* by having a corymbosely fastigiate inflorescence. The white variety was received by Clusius out of a Dutch ship from the Cape; and was cultivated by that learned naturalist, in the Low Countries, as long ago as 1605. The present variety was originally introduced by Mr. Masson. The specimen which afforded our drawing was imported by Mr. Griffin; and flowered in his conservatory at South Lambeth in

June last. The white one has been frequently mistaken for *arabicum*, a very distinct species, and remarkable for its black-green shining and nearly globular germen, faithfully represented by the figure in Curtis's Magazine.

Bulb tunicate, nearly round. *Leaves* several, in different directions, lorately tapered, recurved and usually recumbent, flattish, shining, edged with a fine short down, about 5 inches long, embracing each other convolutely at the base. *Scape* round, glaucous, a foot and a half high, flexuosely upright. *Raceme* manyflowered, corymbosely fastigiate, about half a foot long, at first of an orange-yellow, afterwards strawcoloured. *Bractes* single, convolutely ovate, with a long point, twice shorter than the pedicles or more, these last being about an inch and a half in length. *Corolla* rotately campanulate, about an inch and a half across, converging over the germen soon after expansion, at no time completely and flatly expanded, segments elliptically oblong, nearly equal, concave, lapping over each other by the edges of the sides. *Stamens* 3 times shorter than the corolla, from upright spreading, bent inwards at the top, ash-coloured; *filaments* subulate, winged at the lower part, the wings of the alternate ones broader and deeper than those of the others, and furnished at the top with two blunt-topped convergent teeth. *Germen* ash-coloured, oblong, obtusely three-cornered, slightly 6-furrowed; *style* continuous, short, thickish, three-cornered: *stigma* 3-lobedly headed, slightly pubescent, shorter than the style.

An ornamental greenhouse plant of easy culture. Propagated by offsets from the bulb.

Pub.d by S. Sidgwick Jun.r 170 Piccadilly May 1 1818

BOSSIÆA cinerea.

Sharp-leaved Bossiæa.

DIADELPHIA *DECANDRIA.*

Nat. ord. LEGUMINOSÆ. *Jussieu gen.* 345. *Div. V.*

BOSSIÆA. Cal. bilabiatus: labio superiore majore semibifido obtuso. *Stam.* omnia connexa. *Legumen* plano-compressum, pedicellatum, polyspermum, margine utroque incrassatum. *Sem.* strophiolata. *Brown in Hort. Kew. ed.* 2. 4. 266.

B. *cinerea*, ramis foliosis teretibus, caule erecto ramosissimo, foliis ovato-lanceolatis; suprà scabris; subtùs pubescentibus; marginibus recurvis.

Brown in loc. cit. 268.

Bossiæa calcarata. *Herb. Banks.*

Fruticulus *erectus, strictus, paniculato-ramosus*, ramis *subalternis, simplicibus, lanato-villosis.* Fol. *numerosa, proxima, alterna v. nunc in summis ramis opposita, patentissima, brevissimè petiolata, semuncialia v. ultrà, longè acuminata mucrone spiniformi, margine deflexo denticulato-scabrata, suprà corrugato-venosa, pubescentiâ parcâ et caducâ, subtùs villoso-cinerascentia nervis varicosis:* petiolus *glanduloso-crassus, rugosus, stipulatus:* stipulæ 2, *oppositæ, membranosæ, purpuro-rubentes, lineari-elongatæ, acutæ, angustissimæ, recurvo-divaricantes.* Flores *numerosi, solitarii, axillares, subæquales foliis, in ramis formantes racemos foliosos spicatìm elongatos;* pedunculi *filiformes, atro-rubentes, villosiusculi, breviores flore,* bracteolis 2 *minutis pallidis oppositis propè calycem cum quo sunt continui.* Cal. *turbinato-campanulatus, 5-fidus, limbo inæqualissimè bilabiato;* labio summo *conduplicato, valdè majore, subtruncato-rotundo, emarginato;* imo 3-*partito, lobulis subulatis æqualibus collateralibus recurvis.* Cor. $\frac{1}{4}$ *partem unciæ paulò exsuperans, purpuro-flavescens, duplo longior calyce; pro describendâ verò non habuimus præter emarcidam.*

A very rare species in our collections, and till now unfigured; first observed by Mr. Brown in Van Diemen's Island, and introduced in 1803. The drawing was made from a specimen which flowered in Mr. Herbert's garden at Spofforth, near Wetherby, a source from which we have been liberally and munificently supplied for the use of the present publication. It is cultivated in the greenhouse, and flowers from May to July.

A small bushy shrub; *stem* upright, straight, numerously branched; *branches* subalternate, round, leafy, simple, with a short woolly fur. *Leaves* numerous, near to each other, alternate or sometimes opposite at the upper part of the branches, widespread, ovately lanceolate, about

half an inch long, far acuminate with a point resembling a small prickle, recurved at the margin, denticulately and roughly edged, wrinkly veined and shagreened on the upper side, thinly and caducously pubescent, villous and grey at the underside, where the veins are varicose, very shortly petioled: *petioles* glandular, thick, wrinkled, stipulate: *stipules* 2, opposite, membranous, purple, linearly elongated, extremely narrow, pointed, recurved and divaricate. *Flowers* numerous, solitary, axillary, about the length of the leaves, representing as they are placed along the branches long spikelike leafy racemes: *peduncles* filiform, dark-red, slightly villous, shorter than the flower, with two minute opposite *bractes* near the calyx. *Calyx* turbinately campanulate 5-cleft, with a very unequally bilabiate limb; *upper lip* folded, greatly the largest, subtruncately round, notched in the middle of the margin; *lower lip* 3-parted with small equal subulate parallel recurved segments. *Corolla* about half an inch long, purple and yellow, twice the length of the calyx; but we had no opportunity of observing it before it was decayed.

The genus has been named after Boissieu-Lamartinière, a french naturalist.

Sydenham del. Published by J. Ridgway & Sons 170 Piccadilly Sept 1 1818

RUTA pinnata.

Canary Rue.

DECANDRIA *MONOGYNIA.*

Nat. ord. RUTACEÆ. *Jussieu gen.* 296. *Div. II.* Folia alterna.

RUTA. Cal. 5-partitus parvus persistens. *Pet.* 5 unguiculata concava. *Fil.* basi latiora. *Stig.* 1. *Caps.* 5-loba, 5-loc., inter apices quinquefariàm dehiscens, loculis polyspermis: semina reniformia. *Herbæ aut suffrutices, folia simplicia aut sæpiùs* 1-2-*pinnata; flores terminales corymbosi aut cymosi, in* R. graveolente *omnes summo excepto* 4-*petali* 8-*andri* 4-*oculares.* Juss. l. c. 297.

R. *pinnata*, foliis pinnatis, foliolis lanceolatis basi attenuatis serrato-crenatis, petalis integerrimis. *Hort. Kew.* 2. 58.

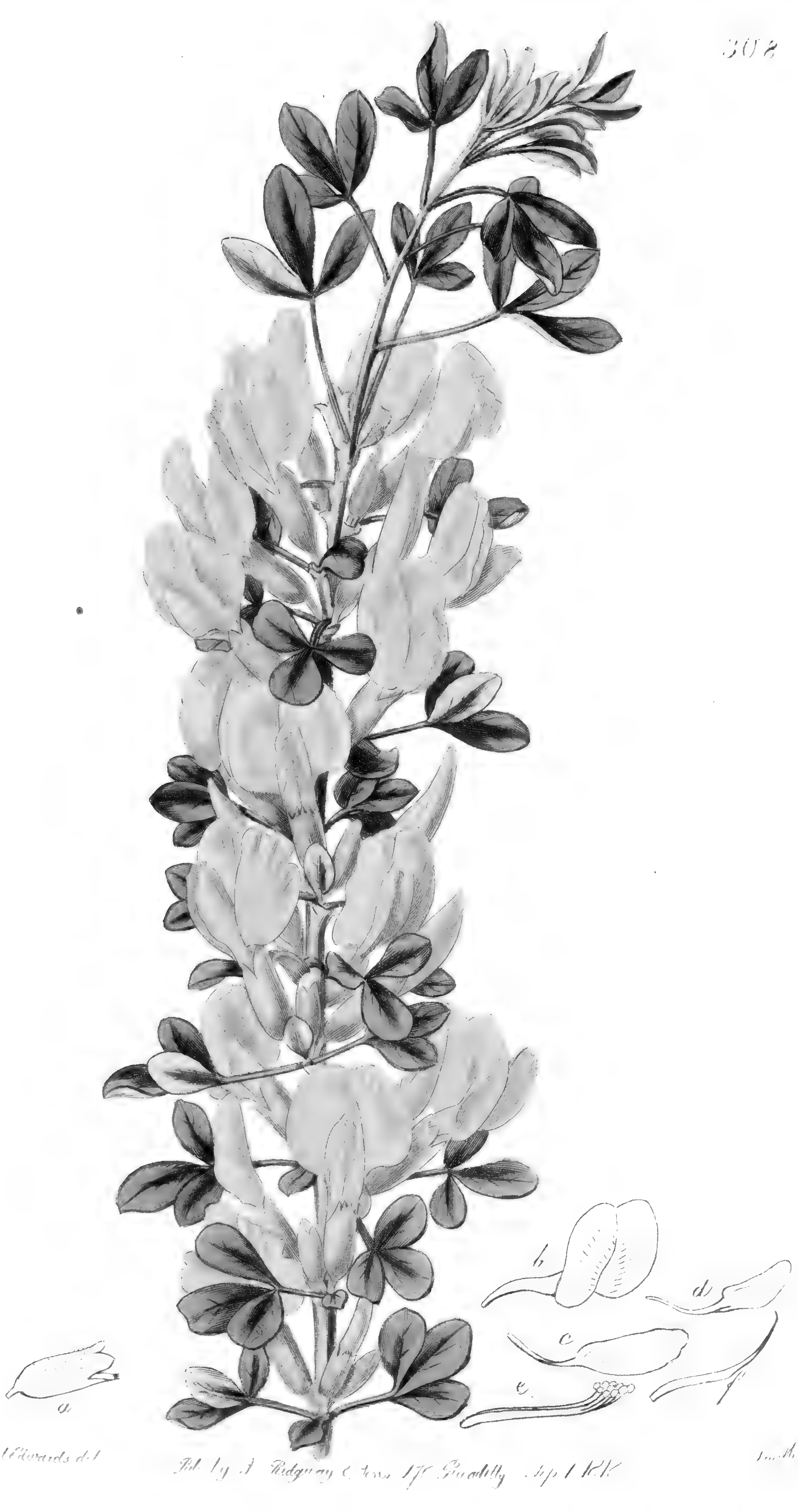
Ruta pinnata. *Linn. suppl.* 232. *Willd. sp. pl.* 2. 544. *Hort. Kew. ed.* 2. 3. 35.

Frutex *erectus, glauciusculus, tritus digitis resinam redolens; rami teretes, punctis minutis scabrati.* Fol. 4-*uncialia v. magìs, ab omni parte puncticulata, alterna, distantia, impari-pinnata, bi-trijuga, patentissima, subtùs albicantia, suprema simplicia, sensìm in meras bracteas decrescentia;* foliola *crenato-dentata, deorsùm attenuata, petiolata, subbiuncialia, lateralia, elongato-oblonga, sublanceolata, opposita, distantia, terminale latius, subovato-lanceolatum:* petiolus communis 3-*uncialis, teres, strictiusculus, articulo flexili pallido subtumido ramo annexus.* Flores *flavi, in summis ramis corymboso-paniculati:* pedunculi *axillares et terminales, suprà foliaceo-cymosi, subdichotomi, pluriflori, ascendentes:* pedicelli *teretes,* 1-*flori, subæquales corollæ.* Cal. 4- *(floris primarii* 5-?) *partitus, subcoriaceo-herbaceus, persistens, segmentis* 3 *acuminatis appressis, uno majore ligulato-oblongo recurvo patente.* Cor. 4-*(floris primarii* 5-?) *petala, caduca.* Germ. *subglobosum, virens, suprà pulvinato-*4-5-*lobum, umbilicatum, insidens disco crasso duriùs carnoso extùs lutescente infernè poris* 10 *circumcircà pertuso,* 4-5-*loculare; præfixum* stylo *setiformi erecto persistente.*

Nine of the ten species which have been recorded of this genus belong either to the south of Europe, the Levant, Coast of Barbary, Egypt, or Arabia. The present is indigenous of the Canary Islands, and was introduced by Mr. Francis Masson in 1780. It has not been represented by any published figure; and was by no means a common plant in our collections. We were favoured with the specimen by Mr. Biggs, the Curator of the Botanic Garden at Cambridge.

The type of this genus does not seem to have been observed in any part of the New World.

An upright slightly glaucous shrub, when bruised emitting a resinous odour, the flavour of which however is not rank and nauseous, like that of the common Garden Rue; branches round, roughened at the surface by minute projecting specks. *Leaves* about 4 inches long or more, covered with small dots on both sides, alternate, distant, unequally pinnate, of from two to three pairs of leaflets, widespread, whitish underneath, uppermost simple, and diminishing at last into mere bractes; *leaflets* lanceolate, crenately toothed, tapered downwards, petioled, about 2 inches long, *side ones* elongatedly oblong, sublanceolate, opposite, wideset, *terminal* one broadest, subovately lanceolate: *common petiole* about 3 inches long, round, stiffish, fixed to the branch by a pale glandular flexile somewhat enlarged joint. *Flowers* deep yellow, forming a corymbose panicle at the tops of the branches: *peduncles* axillary and terminal leafily cymose at the upper part, subdichotomous, several-flowered, ascendent: *pedicles* round, one-flowered, about equal to the corolla. *Calyx* 4- (perhaps in the primary flowers of the panicle 5-?) parted, subcoriaceously herbaceous, persistent with 3 acuminate and close-pressed segments, the fourth larger ligulately oblong spreading and recurved.. *Corolla* 4- (primary flowers 5-?) petalled, caducous. *Germen* subglobular, green, pulvinately 4-5-lobed at the upper part, umbilicated, 4-celled, seated upon a thick hárdish fleshed circular basement (disk) which is yellowish without and perforated at the lower part of its circumference by ten oozing pores: *style* bristleshaped, upright, persistent.



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Pub by A Ridgway & Sons 170 Piccadilly Sept 1 1815

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CYTISUS biflorus.

Hungarian Cytisus.

DIADELPHIA *DECANDRIA.*

Nat. ord. LEGUMINOSÆ. *Jussieu gen.* 352. *Div. V.*
CYTISUS. Suprà vol. 2. *fol.* 121.

C. *biflorus*, pedunculis subbinatis, calycibus oblongis villosis bilabiatis, labio superiore bifido, foliolis oblongo-ellipticis. *Hort. Kew.* 3. 52.

Cytisus biflorus. *L'Herit. stirp.* 184. *Willd. arb.* 197. *Ejusd. sp. pl.* 3. 1125. *Waldst. et Kitaib. hung.* 2. 181. *t.* 166. *Hort. Kew. ed.* 2. 4. 321.

Cytisus glaber. *Lin. suppl.* 328. *Bauh. hist.* 1. 2. *p.* 373.

Frutex *virgato-ramosus;* rami *ascendentes, laxè et sparsìm foliosi, teretes, sericei, seniores fusco-corticati, floriferi ramulis gemmaceis brevissimis fermèque obsoletis verticillato-4-foliis subbifloris numerosissimis spicatìm obsiti.* Fol. *ternata, subuncialia, subtùs sericea, foliolis elliptico-oblongis, acutulis, longitudine ferè petioli, mucrone parvo:* petiolus *sericeus.* Flores *flavi, oblongi, unciam cum* $\frac{1}{4}$ *alterius longi, altiores foliis, collaterali-gemini:* pedunculis *brevissimis crassis.* Cal. *pallido-virens, membranaceus, villosus, duplo brevior vexillo, tubuloso-oblongus, inflatiusculus, compressiusculus, brevissimè bilabiatus,* labiis *erectis coarctatis,* superiore *obtuso emarginato,* inferiore *ovato-attenuato tridenticulato.* Vex. *ungue duriusculo, cuneato, complicato, æquante laminam subrotundam lateribus replicatam, supernè margine undulatam:* alæ *haud multùm breviores, oblongæ, obtusæ, appressæ carinæ, margine corrugatæ: car. viridiuscula, oblongo-falcata, tanto brevior alis quanto illæ vexillo.* Fil. *monadelpha;* anth. *vitellinæ, oblongæ.* Germ. *lineare, compressum, sericeum:* stylus *parùm brevior isto, subulatus, glabriusculus:* stig. *apex obtusus puberulus.*

Native of Hungary. Introduced by Mr. James Gordon about 1760. We are obliged to Mr. Biggs, the Curator of the Cambridge Botanic Garden, for the sample from which the drawing has been made. The species comes very near to *supinus*; but differs from that in having assurgent, and not decumbent branches, leaves that are smooth above and silkily pubescent underneath, not slightly pubescent above and hirsutely furred underneath, bud-scales that are dry and caducous, not herbaceous round and persistent, a pale silky furred calyx with a tridenticulate under lip, not a roughly furred calyx with a quite entire under lip, and lastly, by a corolla which does not turn to a deep purple-red colour before it decays, as it does in *supinus*, which is also a much commoner plant in our gardens than the present.

A virgately branching shrub; branches loosely and scatteredly leaved, smooth, silkily furred, older ones with a dark brown bark, when flowerbearing beset like a spike on all sides by numerous very short and sometimes nearly obsolete verticillately 4-leaved generally 2-flowered branchlets issuing from their proper buds. *Leaves* ternate, about an inch long, silkily furred underneath; *leaflets* elliptically oblong, rather pointed, nearly of the same length as the petiole, with a small mucro or distinct sharp point; *petiole* silkily furred. *Flowers* yellow, oblong, about an inch and a quarter long, longer than the leaves parallelly paired: *peduncles* short, very thick. *Calyx* pale green, membranous, villous, twice shorter than the vexillum, tubularly oblong, slightly swollen, slightly compressed, very shallowly bilabiate; *lips* straight contracted, *upper one* obtuse notched, *lower one* ovate tapered tridenticulate. *Vexillum* with a hardish cuneate folded unguis, of the length of the round lamina, which last is bent back at the sides and waved at the upper part of the margin: *wings* not much shorter than this, oblong, obtuse, pressed closely to the sides of the keel, wrinkled at the edge: *keel* greenish, oblongly falcate, as much shorter than the wings as these are shorter than the vexillum. *Filaments* monadelphous: *anthers* deep yellow, oblong. *Germen* linear, compressed, silkily furred: *style* but little shorter than this, subulate, nearly smooth: *stigma* a blunt slightly pubescent point.

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Pub by S. Ridgway & Sons. 171 Piccadilly Sept 1 1818

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JUSTICIA eustachiana.

St. Eustatia Justicia.

DIANDRIA *MONOGYNIA.*

Nat. ord. ACANTHI. *Jussieu gen.* 102. *Div. II.*
ACANTHACEÆ. *Brown prod.* 472.

JUSTICIA. Cal. æqualis, 5-partitus. *Cor.* valdè irregularis, bilabiata, v. ringens, labio inferiore diviso. *Anth.* 2-loc., loculis insertione sæpiùs inæqualibus. *Fil.* sterilia nulla v. obsoleta. *Germinis* loculi 2-spermi. *Dissepimentum* adnatum. *Sem.* retinaculis subtensa. *Herbæ v. frutices caulescentes, inflorescentiâ variâ.* Brown l. c. 475.

Div. Calyce simplici, corollis bilabiatis: labiis divisis.

J. *eustachiana*, fruticosa, corollis bilabiatis divisis, foliis oblongis acuminatis, spicis axillaribus terminalibusque, bracteis verticillis remotis lanceolatis, antheris ..... *Solander in Sched. Banks. ad exemplarium spontaneum in Herb. Banks. descript.*

Justicia eustachiana. *Vahl. symb.* 2. 15. *Ejusd. enum.* 1. 144. *Jacq. amer.* 4. *t.* 4. *Willd. sp. pl.* 1. 93. *Hort. Kew. ed.* 2. 139.

Frutex *ramosus 2-3-pedalis, subtilitèr subvillosus saturatè virescens;* rami *teretes striati, viridissimi juniores subtetrâgoni.* Fol. *opposita, distantia, ovato-elongata, lanceolata, acuminata, nervosa, infernè repando-subdentata, sæpèque undulata, subtriuncialia, latitudine ferè ¾ partium unciæ, basi brevè attenuata;* petiolus *linearis pluriès brevior laminâ.* Racemi *spicati, aggregati, subtrini? multiflori,* floribus *approximatis brevè pedicellatis,* bracteis *herbaceis lineari-subulatis scabriùs villosis villis brevissimis capitatis, unâ ad basin pedicelli, 2 oppositis superioribus duplo brevioribus calyce.* Cal. *substantiâ pubeque bractearum, 3-plo brevior corollâ, è base turbinata glandulosâ cum pedicello continuus, segmentis linearibus acutis conniventibus.* Cor. *subscarioso-rigens, dilutiùs punicans, sesquiuncialis, extùs laxè et brevè villosa, lucida, tubuloso-infundibuliformis, compressa, ringens;* tubus *cylindraceus virens, subæqualis calyci,* faux *sensim dilatata compressa pallidè purpurascens, intùs flavescens, duplo longior tubo;* limbi rictus *subæqualis fauci, saturatiùs rubens flavo et viridi-pictus,* labia *æquilonga,* superius *angustius, lineari-oblongum, convoluto-concavum, dorso 3-sulco-striatum, apice brevè attenuatum emarginatum viridi et flavo variegatum lobulis obtusis reflexis,* inferius *triplo latius, patens, 3-fidum laciniis oblongis carinatis intùs saturatè purpureis striâ mediâ longitudinali flavicante extùs flavo-virentibus apice 2-fidis replicatis, mediâ sublatiore subovato-oblongâ fissurâ divaricatiore.* Fil. *subæqualia limbo, semifiliformia v. linearia hinc teretia, indè plana, infrà intra faucem pilosiuscula.* Anth. *lineari-lanceolatæ, virides, uni-v. biloculares, brevissimè pedicellatæ.* Germ. *oblongum suprà villosiusculum, disco positum glanduloso glabro:* stylus *brevior corollâ, glaber, filiformis:* stig. *apex transversè 2-fidum virens glaber.*

After much doubt, we have decided in regard to the species of this plant, by the indigenous specimens in the Banksian Herbarium brought from the Island of St. Christopher by Mr. Masson, and which have been the authority

for the species both to Dr. Solander and Mr. Dryander. Jacquin's figure is from a dilapidated dried sample, and is good for little. Vahl's description has been most probably derived from the same source as that of Messrs. Solander and Dryander; if so, it is far from correct. The bractes are not cuneate, as he describes them. In fact we rely simply upon the Banksian Herbarium for the species.

A branching shrub from two to three feet high, finely and loosely villous, of a deep green; branches green, round, except at the newest joints, where they are slightly squared, streaked. *Leaves* opposite, distant, elongatedly ovate, lanceolate, acuminate, nerved, at the lower part repandly subdentate, often waved, about 3 inches long and ¾ of an inch broad, shortly narrowed at the base; *petiole* linear, several times shorter than the blade. *Racemes* axillary, terminal, spiked, aggregated, by threes? manyflowered, flowers near, shortly pedicled; *bractes* herbaceous linearly subulate roughishly villous with very short headed villi, one at the base of the pedicle, two above which are twice shorter than the calyx. *Calyx* of the same substance, and with the same pubescence as the bractes, 3 times shorter than the corolla, segments linear pointed connivent. *Corolla* subscariosely stiffened, of a diluted purplish crimson, an inch and half long, villous on the outside and shining, tubularly funnelform, compressed, ringent; *tube* cylindrical, green, of nearly the length of the calyx, *faux* gradually enlarged, compressed pale purple, yellow on the inside, twice the length of the tube, *the lips of the limb* about the length of the faux, of a deeper red and marked with yellow and green, equal in length, *upper one* narrower, linearly oblong, convolutely concave, at the back trisulcately fluted, shortly tapered at the top, notched and variegated with green and yellow, lobules obtuse reflectent, *lower lip* three times broader, spreading, 3-cleft, segments oblong keeled deeply purpled inwards with a yellow streak along the middle, outwards yellowishly green, bifid at the end and reflectent, the middle subovately oblong, rather broader than the rest, with a wider fissure at the end. *Anthers* linearly lanceolate, green, shortly pedicled, generally with one loculament, sometimes with two.

The drawing was taken in the hothouse of Messrs. Whitley and Co. in June last. Introduced in 1799 by Sir Joseph Banks.

Edwards del.

Pub. by J. Ridgway & Son, 170 Piccadilly Sept. 1 18.

ÆSCULUS discolor.

Bicolor-leaved american Horse-Chestnut or Buck's Eye Tree.

HEPTANDRIA *MONOGYNIA.*

Nat. ord. ACERA. *Jussieu gen.* 250. *Div. I.* Fructus multilocularis, *ÆSCULUS. Cal.* tubulosus 5-lobus. *Pet.* 5-4, inæqualia; horum 2 superiora angustiora. *Stam.* inæqualia; *antheræ* subincumbentes. *Germ.* desinens in stylum conicum; *stigma* 1. *Caps.* coriacea, muricata aut inermis, subrotunda 3-locularis 3-valvis, loculis 2-spermis; *semina* magna, hylo lato, cortice coriaceo, quædam abortiva. *Arbores; folia digitata; flores racemosi terminales, pedicellis suprà racemum articulatis, quidam steriles; semen ferè Castaneæ, undè nomen vernaculum.* Juss. l. c. 251.

Æ. *discolor*, foliis quinatis utrinque acuminatis subtùs tomentosis inæqualitèr serrulatis, racemo thyrsoideo, fasciculis multifloris, corollis 4-petalis, petalorum conniventium unguibus longitudine calycis, staminibus 7 corollâ brevioribus, fructibus inermibus. *Pursh amer. sept.* 1. 255.

Arbuscula 2-3-pedalis, ramis teretibus glabris. Fol. *molliuscula, cum petiolo simul sumta nunc sesquipedalia:* foliola *inæqualia, oblongo-lanceolata, absque omni rugâ, cuspidato-acuminata, suprà glabra tenerè virentia, costâ mediâ nervos numerosos parallelos ascendentes utrinque emittente, obsoletè serrata, subtùs tomentoso-albicantia, infernè longè attenuata, lateralia ima obliqua.* Thyrsi *terminales, erecti, laxiùs multiflori, 3-4-unciales, patuli, lanugine densâ undìque pubentes,* pedunculo *tereti,* pedicellis *basi articulatis, inferioribus 3-floris, superioribus 1-floris, pluriès brevioribus corollâ.* Flores *sesquiunciales masculi cum hermaphroditis mixti v. polygami, viscoso-tomentosi, tricolores, punctato-rubentes.* Cal. *membranosus, pallidior corollâ, cylindricus, 3-plo brevior petalis 2 longioribus, inflatiusculus, 5-dentatus, dentibus brevibus, latis, inæqualibus, rotundatis, 1 majore.* Cor. 4-*petala, varicoso-venosa, punctis viscosis atropurpureis efflorescens:* pet. 2 exteriora *opposita, erecta, æquantia ungues 2 interiorum, laminâ cordatâ apice rotundo;* 2 interiora *erecto-conniventia, lineari-spathulata, laminâ parvâ obcordato-rotundâ antrorsùm obliquatâ.* Stam. 7 *inclusa, longitudine petalorum exteriorum, inæqualia:* fil. *lanato-pilosa:* anth. *aurantiacæ.* Pist. *æquale staminibus:* germ. *oblongum, albo-hirsutum:* stylus *purpureo-tomentosus crassior filamentis.*

A tree-like shrub, in the specimen we saw not more than two feet high, but mentioned by Mr. Pursh, by whom it was first recorded, as attaining the height of four feet. Indigenous of North America, where it is found principally in the western territory of Georgia. Introduced some years ago by Mr. Lyon; but is still extremely rare with us; indeed we are not aware that it is in any other collection than that of Messrs. Whitley, Brames, and Milnes, of the

Fulham nursery, where the present drawing was taken. It is perfectly hardy, and flowers in May and June. The foliage is extremely handsome.

The genus has been sometimes divided into *Hippocastanum*, consisting only of the common Horse Chestnut, a native of Asia; and *Pavia*, now consisting of six species, all natives of North America. In the first the corolla is 5-petalled, in the second always 4-petalled. The species in the last are called by the Anglo-Americans Buck's-Eye-Trees, from the appearance of the chestnut out of its shell.

Bark smooth, pale brown. *Leaves* soft, with the petioles sometimes a foot and half long: *leaflets* unequal, oblongly lanceolate without the least appearance of wrinkles, cuspidately acuminate, smooth and of a tender green above, with a midrib putting out from each side numerous parallel ascendent nerves, obsoletely serrate, covered underneath with a white woolly down, far tapered downwards, the lowermost side ones slanted. *Thyrses* terminal, upright, loosely manyflowered, 3-4 inches long, spreading, furred over with a close down; *peduncle* round, *pedicles* jointed at the base, lower one 3-flowered, upper ones 1-flowered, several times shorter than the corolla. *Flowers* an inch and half long, some with only stamens, some with stamens and pistil, viscously tomentose, tricoloured, the red dots predominating in the hue. *Calyx* membranous paler than the corolla, cylindrical, somewhat swollen, 3 times shorter than the 2 longest petals, 5-toothed, teeth short, broad, unequal, rounded, one larger than the rest. *Corolla* 4-petalled, varicosely veined, dotted with minute dark purple viscous glands: 2 *outer petals* opposite, upright, equalling the ungues of the two interior ones, with a cordate round pointed lamina: 2 *inner petals* upright, connivent, linearly spatulate, with a small obcordately round lamina slanting forwards. *Stamens* 7, inclosed, the length of the shorter petals, unequal; *filaments* woolly haired: *anthers* with orange-coloured pollen. *Pistil* equal to the stamens: *germen* oblong, hirsute, white: *style* thicker than the filaments, covered with a purple downy pubescence.

Ed Edwards del

Pub by J. Ridgway & Sons 170 Piccadilly Sept 1 1818

ALBUCA fugax.

Fugacious-flowered Albuca.

HEXANDRIA *MONOGYNIA.*

Nat. ord. ASPHODELI. *Jussieu gen.* 51. *Div. IV.*
ASPHODELEÆ. *Brown prod.* 274.
ALBUCA. *Suprà fol.* 277.

Div. Corollis æqualitèr patentibus.

A. *fugax*, foliis numerosis, subtrigono-filiformibus, subulatis, duplo brevioribus scapo, erectis: stylo declinato, curvo.

Anthericum fragrans. *Jacq. hort. schœnb.* 1. 45. *t.* 86. *Willd. sp. pl.* 2. 135. *Hort. Kew. ed.* 2. 2. 266.

Bulbus *subrotundus, compacto-squamosus, sordescens.* Fol. *numerosa, erecto-patula, fasciculato-ambientia, carnosa, semitereti-linearia, subulata, obsolètè et obtusè subtrigona, hìnc planiora, recta, semipedalia, crassitudine ferè pennæ corvinæ, non glauca, vaginâ radicali nullâ.* Scapus *pedalis v. ultrà, teres, erectus, glaucus, plurimùm crassior foliis*, racemo *terminali, laxiusculo, multifloro, patente, semipedali v. ultrà.* Pedunculi *patentes, breviores flore, semunciales.* Bracteæ *breviores pedunculis, membranaceæ, albicantes, acuminatæ.* Cor. *horizontem respiciens, succulenta, tenera, citò collabens, ultra unciam transversa, subrotata, laciniis non contiguis, oblongis, obtusis, apice incurvis, albidis, extùs et summitate colore sordidè purpureo partìm suffusis, lineâ mediâ viridi profundè carinatâ percursis.* Stam. *duplo breviora corollâ, æqualia, glabra, paululùm declinata:* fil. *subulata:* anth. *flavæ erectæ, oblongæ, vertice hiantes.* Pist. *subæquale corollæ:* germ. *oblongum, prismaticum, angulis bicostatis:* stylus *purpurascens, crassiusculus, lineari-triqueter, declinatus, curvo leni assurgens:* stigma *cavum, subtrifido-apertum, pubescens.*

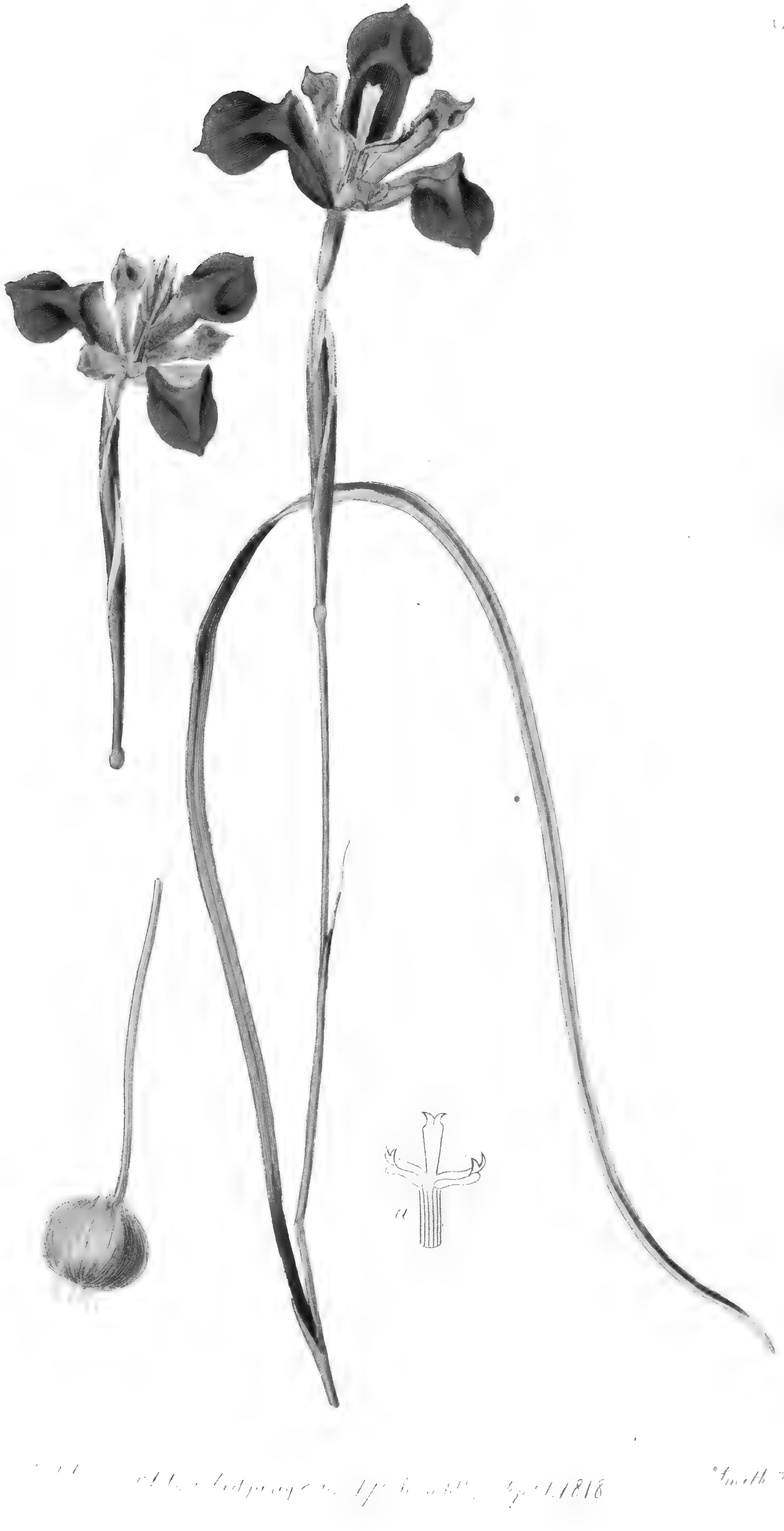
The present plant evidently comes nearer to this genus, both in character and habit, than to either ANTHERICUM or ORNITHOGALUM. It belongs to the section in which we have placed *exuviata*, *vittata*, and *physodes* in Curtis's Magazine (Nos. 871, 1046, 1329), species which will probably be at some period formed into a separate genus.

Introduced from the Cape of Good Hope by Mr. Masson in 1795. The drawing was taken from a sample which flowered in June last in Mr. Griffin's conservatory at South Lambeth, and was produced by a bulb which had been sent from the Cape.

Bulb round, compactly scaled, of a pale squalid purplish brown. *Leaves* numerous, fascicled, upright, slightly divergent, fleshy, semicylindrically linear, subulate, obso-

letely and roundedly 3-cornered, flatter on one side, straight, half a foot long, about as thick as a crow-quill, not glaucous, nor with a root-sheath as in ALBUCA *exuviata*. *Scape* a foot or more high, round, upright, glaucous, much thicker than the leaves; *raceme* terminal, loosely set, many-flowered, spreading, half a foot long or more. *Peduncles* spreading, about half an inch long. *Bractes* shorter than the peduncles, membranous, whitish, acuminate. *Corolla* fronting the horizon, succulent, tender, soon collapsing, more than an inch in diameter, subrotate; *segments* not touching each other above, oblong, obtuse, bent inwards at the top, whitish, on the outside and at the top suffused in part with a dullish brown purple, traversed longitudinally by a green stripe deeply keeled on the outside. *Stamens* twice shorter than the corolla, equal smooth, slightly declined: *filaments* subulate: *anthers* deep yellow, upright, widely dehiscent at the ends. *Pistil* about equal to the corolla: *germen* oblong, prism-shaped, with two-ribbed corners: *style* purplish, thickish, linearly three-cornered, declined, rising again with a gentle curve: *stigma* hollow, open, slightly trifid, pubescent.

There are some slight discrepancies between our plant and Jacquin's figure and description of the pistil, which we suspect arise from an oversight in the draughtsman, rather than that they are real distinctions.



Smith fc

MORÆA lurida.

Mr. Griffin's Moræa.

TRIANDRIA *MONOGYNIA.*

Nat. ord. ENSATÆ. *Lin. Ord. nat. VI. Nobis in Ann. of Bot.* 1. 219. IRIDES. *Jussieu gen.* 57. IRIDEÆ. *Brown prod.* 302.

MORÆA. Inflor. pauci-pluriflora, fasciculata, *spathis* communi bivalvi involutis distincta; rarò uniflora, rariùs in spicam educta. *Cor.* supera, erecta, involuto-decidua, hexapetalo-partita s. tubuloso-sexfida, laciniis obversis, rotatis s. infernè conniventibus, alternis consimilibus; *exterioribus* ungue sæpè barbato, sæpè foveolâ ad basin, laminâ nunquam erectâ; *interioribus* angustioribus, rarò minimis v. nullis, interdùm omninò erectis. *Stylus* triquetro-filiformis, erectus, liberus. *Stig.* 3, petaliformia, trifaria anticè fornicata, posticè carinata, bilabiata labio *interiore* bifido reflexo *exterius* breve retusum multotiès v. fermè non excedente: rarò lineari-radiata, bipartita, segmentis convoluto-filiformibus. *Fil.* corollæ v. limbi disco imposita, libera s. partìm v. omninò connata. *Anth.* erectæ, extrorsæ, lineari-oblongæ, faciebus stigmatum appressæ, *vel* segmentis intersertæ. *Caps.* membranacea, ovato-globosa ad prismatico-columnarem, 3-loc., loculis biseriato-polyspermis, 3-valv. valvis medio septigeris. *Sem.* septi margini interiori utrinque annexa, rotunda s. angulato-pressa; *albumen* corneum.

Radix *bulbo-tuber, integumento externo senescente putamineo-fibroso, reticulato-rimoso;* folia *radicalia pauca, transversè bifaria, fistuloso-vaginantia, indè convoluto-lorata, sæpiùs caudato-cuspidata, rarò plura et acutè canaliculata, nunquàm collaterali-disticha;* caulis *culmaceus, vaginoso-foliatus, simplex ad ramosissimum rami è vaginâ ad articulos, solitarii, interdùm aggregati, rarò divisi;* flores *terminales, pedunculati, sæpiùs fugaces.* MORÆA iridioides *ad* IRIDEM *cum nomine* moræoidis *rectiùs transferenda.* Nobis in Curtis's magaz. 1612.

Div. Corolla hexapetalo-partita: stigmata petaliformia.

M. *lurida*, uniflora, papilloso-subbarbata; foliis subtrinis linearibus, caule simplici; corollâ biformi, inæquali, laminis exterioribus subrotundis, interioribus sub4plo minoribus integerrimis.

Spithamæa magisve, erecta. Caulis *gracillimus, vix triplo crassior pilo capitis, strictus, elasticus, bi-triarticulatus, subtrifolius.* Fol. *graminea, glabra, imum infernè vaginans, indè convoluto-explicatum, lineare latitudine fermè 2 linearum, striatulum, supernè versùs attenuatum, alia 2 brevia, vaginantia, distantia.* Spatha *subbiuncialis, fusiformis, viridis, aristato-acuminata, valvis convoluto-complexis.* Pedunculus *subæqualis spathæ.* Germ. *oblongum, viride, obtusè prismaticum, 3-4-plo brevius pedunculo.* Cor. *rubro-fusca, diametro subsesquiunciali, urceolato-rotata:* lac. 3 exteriores *plus minus 4plo majores, elongato-obovatæ,* ungue *cuneato concavo intùs papilloso-pruinato,* laminâ *breviore ungue, subrotundâ utrinque reflectendâ acumine obsoleto brevi:* 3 interiores *spathulato-cuneatæ, exteriorum unguibus longitudine æquales, 3-4-plo angustiores, involuto-concavæ, glaberrimæ,* laminâ *brevissimâ oblato-ovatâ acuminatâ.* Stam. *subsuperantia ungues laciniarum, æqualia stigmatibus:* fil. *monadelpha v. discreta, sublongiora antheris:* anth. *lineares,*

testâ nigricante, polline *aurantiaco*. Stig. *lineari-oblonga, connatis filamentis coarctato-erecta, istis discretis divaricata, lurido-purpurea*, labio interiori *segmentis acuminatis*, exteriori *breviori concolori plano*.

Excepting MORÆA *Sisyrinchium*, the roots or bulb-tubers of which are known by the name of Spanish nuts, and are esculent, the whole of this beautiful and numerous genus, as far as we are acquainted with it, belongs to South Africa. We say this under the impression that the species which have been ranked under MORÆA in Mr. Kunth's edition of Humboldt and Bonpland's Flora of South America, will be found, when inspected in the living plant, not to be genuine congeners of it. We have elsewhere observed, that the only constant mark between this genus and IRIS, exists in the nature of the root, which is here a bulb-tuber, but never such in IRIS. A distinction, which as it constantly induces a concomitant variation in the general habit of the plants, is as usefully available as one found in some other part of greater technical privilege.

The present is an unrecorded species, and has been lately introduced from the Cape by Mr. Griffin, with whom it flowered at South Lambeth in June last. No vegetable group displays a greater variety of beautiful and brilliant hues than this genus. The tint of the present flower, though sombre, is singular and of a richness in the living flower that cannot be adequately rendered, by any means within the reach of a work of this nature. Its nearest congeners are *tricuspis*, *tenuis*, and *tristis*; but it differs from the two first in having the inner alternate segments of the corolla undivided, and from the latter in having the same several times smaller than the outer ones.

About a span high or rather more, upright. *Stem* simple, very slender, not much more than thrice the thickness of a hair, elastic, straight, two or three jointed, with about three leaves. *Leaves* grassy, linear, smooth, lowermost one sheathing at the lower part, upwards convolutely flat, about two lines broad, streakletted, tapered towards the top, two others short, sheathing, distant. *Spathe* one-flowered, fusiform or spindle-shaped, about two inches long, green, awnedly acuminate, the valves rolled one within the other. *Peduncle* about equal to the spathe. *Germen* oblong, green, prism-shaped with obtuse corners, three or

four times shorter than the peduncle. *Corolla* of a reddish brown colour, urceolately rotate, about an inch and a half across: 3 *outer segments* about 4 times the largest, elongatedly obovate, *unguis* cuneate concave and papulously frosted within on the space where the beard usually is in many others, *lamina* shorter than the unguis, nearly round, reflected on both sides, ending in a short point: 3 *inner segments* spatulately cuneate, the length of the ungues of the outer ones, 3 or 4 times narrower than these, involutely concave, quite smooth, *lamina* very shallow oblately ovate acuminate. *Stamens* rather higher than the ungues of the segments, equal to the stigmas: *filaments* connate or sometimes separate, rather longer than the anthers: *anthers* linear, blackish; *pollen* orange-coloured. *Stigmas* linearly oblong, when the filaments are connate upright and closely convergent, but when these are separate widespread, of a dingy purple colour; *inner lip* with pointed segments; *outer* short, of the same colour, flat.

Pub.d by T. Rodgers & Sons 1/8 Broadway Sept 1 1818

ERYTHRINA Crista galli.

Cock's-comb Coral-tree.

DIADELPHIA *DECANDRIA.*

Nat. ord. LEGUMINOSÆ. *Jussieu gen.* 345. *Div. V.*

ERYTHRINA. Cal. limbo lobato inæquali v. subintegro, recto v. obliquo. *Vex.* longissimum; alæ *et* carina 2-petala multò breviores. *Stam.* basi monadelpha. *Legum.* longum polyspermum torulosum, *sem.* reniformia hylo laterali. *Arbusculæ aculeatæ inermesve, aut frutices interdùm subherbacei; folia ut in* DOLICHO *ternata stipulacea, petiolulis articulatis et aristatis s. glandulosis, rariùs simplicia; flores fasciculati axillares aut spicati terminales, sæpè coccinei. Stam.* E. Crista galli *diadelpha. Alæ et carina vexillo æquales in* E. isopetala *Lamarck ideò fortè non congeneri.* Juss. l. c. 356.

E. *Crista galli*, foliis ternatis, petiolis subaculeatis glandulosis, caule arboreo inermi. *Lin. syst. nat. ed.* 12. 473.
Erythrina Crista galli. *Lin. Mant.* 99. *Hort. Kew.* 3. 9. *ed.* 2. 4. 252. *Lamarck encyc.* 2. 391. *Willd. sp. pl.* 3. 916. *Smith exot. bot.* 2. 69. *t.* 95.
Erythrina laurifolia. *Jacq. obs.* 3. 1. *t.* 51.
Coral arbor non spinosa trifolia. *Pet. mus.* 76. *Raj. dendr.* 100.

We are obliged to Mr. Herbert for the specimen of this fine plant. It flowered in his hothouse at Spofforth. As we had however no opportunity of taking a description while the blossom was fresh, we shall borrow Sir James E. Smith's description in the Exotic Botany:

"Its branches are round, furnished, as well as the leaf-
"stalks, with a few hooked prickles. Every part, except
"the germen, is destitute of pubescence. *Leaves* ternate;
"leaflets ovate, entire, stalked, with prickly ribs. A pair
"of glands are placed at the base of the partial footstalks.
"Flower-stalks clustered, terminal and axillary, short and
"simple. *Flowers* of a rich unpolished red. *Calyx* bell-
"shaped, with two small bractes at its base; its margin
"slightly 2-lobed, membranous, with 2 little teeth, one of
"which is hooked. *Keel* of one petal, more than half as
"long as the *standard. Wings* very small, slightly 3-lobed.
"*Stamens* truly diadelphous. *Stigma* small, simple, or
"slightly capitate. *Germen* downy. The fruit we have
"not seen.

" The monopetalous keel, the perfectly diadelphous sta-
" mens, and the form of the stigma, do not properly belong
" to this genus, yet the habit is such that it would be rash
" on those characters alone to form a new one. In some
" other species the calyx is no less anomalous."

In its native country, Brazil, it is said to be a lofty tree. When grown here in our stoves, it has been seldom seen above 6 feet high. Introduced by Mr. Francis Bearsley in 1771. Flowers Spring and Summer.

Lyd Edwards del. Pubd by J Ridgway & Sons 170 Piccadilly. Octr 1.1812. Smith Sc.

LACHENALIA pallida. α.
Pale-blue-flowered Lachenalia.

HEXANDRIA *MONOGYNIA.*

Nat. ord. ASPHODELI. *Jussieu gen.* 51. *Div. III.*

Lachenalia pallida. *Vide suprà fol.* 287.

We have thought it useful to add a figure of the prototype variety of this species, to that we have ranked as its variety β in the 287th article of this work; where we refer for the synonymy and history of the plant. The present variety is by no means common in our collections. We are obliged to Mr. Griffin, for the specimen from which the drawing was taken. It flowered this summer, in the conservatory at South Lambeth; and had been imported from the Cape of Good Hope.

Sydd Edwards del

ORNITHOGALUM revolutum.

Revolute-flowered Star-of-Bethlehem.

HEXANDRIA *MONOGYNIA.*

Nat. ord. ASPHODELI. *Jussieu gen.* 53.
ASPHODELEÆ. *Brown prod.* 274.
ORNITHOGALUM. Suprà vol. 2. *fol.* 158.

O. *revolutum*, racemo paucifloro, petalis lineari-oblongis obliquè flexis emarginatis, filamentis lanceolato-subulatis, foliis linearibus. *Willd. sp. pl.* 2. 118.

Ornithogalum revolutum. *Jacq. hort. schœnb.* 1. 46. *t.* 89. *Curtis's magaz.* 658. *Hort. Kew. ed.* 2. 2. 258.

Totum glabrum. Bulbus *subrotundus, tunicatus, albidus, avellanæ magnitudine.* Folia *sæpè tria, sublinearia, integerrima, obtusula, infernè canaliculata, cæterùm planiuscula, erectiuscula, plus minus semipedalia.* Scapus *teres, calamo gracilior, plus minus octo uncias longus, flexuosus, erectus, racemosus, multiflorus.* Pedunculi *crassuli, unciales.* Bracteæ *lanceolatæ, acuminatæ, conniventes et amplexantes, scariosæ, infernè albidæ, supernè fuscescentes, pedunculis duplo breviores.* Corollæ *laciniæ obversè ovatæ, obtusulæ, ad oras revolutæ, convexulæ, patentissimæ, subæquales, ferè unciales, albæ cum base solâ utrinque virente.* Fil. *subulata, planiuscula, erecta, brevia, alba, tria alterna basi latiora.* Anth. *oblongæ, subincumbentes, flavæ.* Germ. *ovatum, 3-sulcatum.* Stylus *crassus, brevis.* Stigma *capitatum, subrotundum, flavescens.* Jacq. loc. cit.

We are obliged to Mr. Griffin for the specimen from which the drawing of this rare species was taken. The bulb had been imported from the Cape of Good Hope, where it is native, and had been first observed by Mr. Masson, who introduced it in 1795. Not having had an opportunity of describing it from the present plant, we shall subjoin a description which we have given in another work from another specimen.

Bulb tunicated. *Leaves* 3-6 inches long, ambient, recurvedly patent, linearly lanceolate, thickish, nearly flat upwards, channelled downwards, edged with a very slender minutely ciliate white cartilage. *Scape* about eight inches high, upright, round, flexuose. *Raceme* conically oblong; *flowers* white, with a round darkish stain at the base, scentless; *bractes* acuminately lanceolate, convolute, some of the lower ones equal to the peduncles, upper ones gradually shortened, greenly or sphacelately membranous. *Corolla*

divaricately expanded, segments revolute at the sides, hence with the appearance of being linear and convex in front, *outer ones* somewhat obovate, often emarginate or slightly threetoothed; *inner ones* more pointed and entire. *Filaments* three times shorter than the corolla, upright, connivent subulate, involutely channelled downwards, membranously winged towards the base where they are pressed close to the germen, the three alternate ones opposite to the inner segments have their membranous wings flatly extended and terminating in two connivent teethlets, but not so conspicuously as in many other species of the genus. *Anthers* incumbent, dehiscent at both ends. *Pistil* equal to the stamens. *Germen* oblongly oval, bluntly three-cornered, blackish green, marked by six parallel lines continued along the style. *Style* subulate, twice shorter than the germen or more; *stigma* subtrilobedly capitate, lobes channelled.

Boyd Edwards del. Lith. by J. Ridgway & Sons 169 Piccadilly, Corner of Air St. Smith sc.

ORNITHOGALUM thyrsoides; *α. album.*

White thyrse-flowering Star-of-Bethlehem.

HEXANDRIA *MONOGYNIA.*

Nat. ord. ASPHODELI. *Jussieu gen.* 53.
ASPHODELEÆ. *Brown prod.* 274.
ORNITHOGALUM. Suprà vol. 2. *fol.* 158.

Ornithogalum thyrsoides. *Vide suprà fol.* 305.

In the 305th article of the number of this work for last August, we have already given the synonymy and description of this fine species. In that article the yellow variety was the subject, in this the white one, which seems to have been no where represented in a way which it deserves. We are obliged to Mr. Griffin for the specimen for the drawing. The bulb was imported by that gentleman from the Cape of Good Hope. It is a free flowerer, and lasts a long time in bloom.

ERRATUM.

Fol. 307. *line* 6 *from bottom; for* "was" *read* "is."

Vigd Edwards del. Sibley & Ridgeway sc. Lon. 179 Piccadilly. Oct.1.1814 Swash

IPOMŒA denticulata.

Van Rheede's East Indian Ipomœa.

PENTANDRIA *MONOGYNIA.*

Nat. ord. CONVOLVULI. *Jussieu gen.* 132. *Div. I.*
CONVOLVULACEÆ. *Brown prod.* 481. *Sect. I.*
IPOMŒA. Suprà vol. 1. *fol.* 9.

I. *denticulata*, glabra, foliis hastatis lanceolatis linearibusve acutissimis, lobis posticis dentatis, pedunculis unifloris, calycibus subæqualibus: foliolis oblongo-lanceolatis acuminatis. *Brown prod.* 485.
Convolvulus Medium. *Hort. Kew.* 1. 208. *ed.* 2. 1. 328; *(vix tamen Linnæi, ob foliola calycis sagittata nuncupata ut in* CAMPANULA Medio).
Tala-neli. *Rheede mal.* 11. 113. *tab.* 55.

Planta perennis, suffruticosa, subtripedalis. Folia *sessilia, sesquiuncialia v. ultra, decrescentia, latiora vix tertiam unciæ lata, inter lobulos baseos includentia ramum.* Pedunculi *solitarii, subbreviores folio, graciles, erecti, uniflori rariùs bi-tri-flori (subvillosi?)* Bracteæ 2, *parvulæ, oppositæ, lanceolatæ paulò supra medium pedunculi sitæ.* Flores *straminei, ad plicas lutescentes, tubo intùs sanguineo, limbo* ¾ *unciæ transverso:* stigma *virens:* antheræ *ochroleucæ.*

That our plant is the CONVOLVULUS *Medium* of the Hortus Kewensis, we have satisfied ourselves by the inspection of the Banksian Herbarium, where the specimen is preserved by which the species intended in that work was determined. By the same means we know that it was also held by the learned compiler of the above work to be the *Medium* of Linnæus, who instituted that species. It is plainly the plant of Van Rheede's work, cited as a synonym by Linnæus. But still, as Linnæus has described the leaflets of the calyx of his CONVOLVULUS *Medium* as "*arrow-headed like those of the* CAMPANULA Medium;" and as this is not the case in our present plant, we agree with Mr. Brown, that it can never be held to be of the same species without imputing an improbable error to Linnæus, and that it is safer to place it under a new specific name; at least for the present.

The specimen of this rare vegetable was sent by Mr. Herbert from Spofforth, who tells us, that it had been raised from seed gathered on the banks of the river Pri in Penang, where it was found growing in the same situation as the IPOMŒA *Quamoclit.* The species was introduced by Dr. William Roxburgh in 1778; and is native of New Hol-

land as well as of the East Indies. We had no opportunity of describing the specimen we received, after the drawing was taken; but are obliged entirely to Mr. Herbert for what we have to say of the plant.

Root perennial; *stem* suffrutescent, growing to about three yards in height. *Leaves* sessile, about an inch and a half long or upwards, decrescent, scarcely the third of an inch broad, enclosing the branch between the lobes at their base. *Peduncles* solitary, somewhat shorter than the leaf, slender upright, one flowered, rarely 2 or 3-flowered (subvillous?) *Bractes* two, small, opposite, lanceolate, placed a little above the middle of the peduncle. *Flowers* straw-coloured, yellower at the plaits of the limb; *tube* crimson on the inside; *limb* about $\frac{3}{4}$ of an inch across: *stigma* greenish: *anthers* cream-coloured.

Cultivated in the stove, where it flowers from June to November, and ripens its seeds, which are of a pale brown colour, and about the size and shape of those of IPOMŒA *coccinea*. The ends of the branches are clipped in the winter, by which more abundant and stronger shoots are produced in the ensuing summer.

CONVOLVULUS involucratus.

Leafy-cupped Guinea Bindweed.

PENTANDRIA *MONOGYNIA.*

Nat. ord. CONVOLVULI. *Jussieu gen.* 132.
CONVOLVULACEÆ. *Brown prod.* 481.
CONVOLVULUS. Suprà vol. 2. *fol.* 133.

Div. Caule volubili.

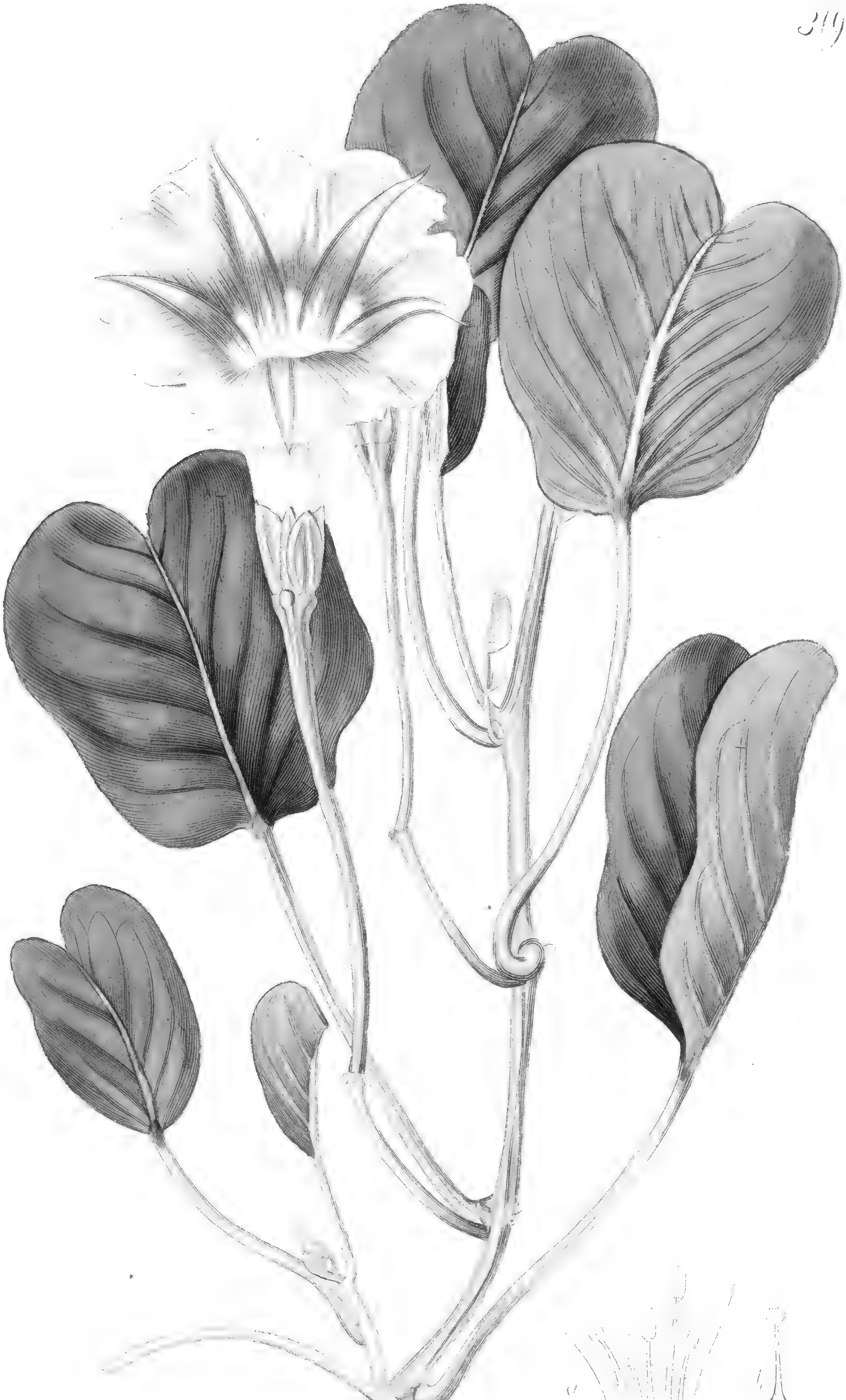
C. *involucratus*, foliis cordato-hastatis pubescentibus, pedunculis subtrifloris, calycibus bracteatis. *Willd. sp. pl.* 1. 845.

Planta annua, tota villosa. Caulis *herbaceus, teres.* Folia *cordato-hastata, subtriuncialia, lobo medio ovato-acuminato, cuspidato, lateralibus pluriès minoribus horizontalibus, brevissimè ovatis:* petiolus *teres, parùm brevior folio, crassitudine ferè ramorum.* Pedunculi *solitarii*, 1-3-*flori, multùm longiores at graciliores petiolo, longiores vel æquales folio, teretes, strictiusculi, nunc suprà semel v. bis brevitèr divisi,* bracteis 2 *oblongo-acuminatis sub quâque divisurâ:* pedicelli *breves.* Bracteæ florales 2 *angustæ, linearilanceolatæ, breviores calyce sub quoque flore.* Cal. *foliaceus, magnus, inæqualis, villosus, persistens, mollis, recurvo-patens;* foliola 2 *exteriora maxima, inter se æqualia, lato-ovata, acuta, opposita, nervosa, (à Willdenovio pro* bracteis *habita?);* interiora *tria istis conformia, minora, inter se inæqualia.* Cor. *extùs pubescens, rotato-infundibuliformis, limbo obsoletè quinquangulari.* Fil. *subulata, alato-membranosa, planiuscula, subpubescentia, tubo brevè adnata, singula posticè ad juncturam cum fauce dentibus* 2 *obsoletissimis excepta.* Anth. *pallidæ, erectæ, sagittato-lineares, longitudine ferè filamentorum.* Pistillum *æquale calyci:* germen *hirsutum semibiloculare,* 4-*spermum;* stylus *capillaris, pilosus, coloratus, indivisus:* stigmata 2, *lobiformia, divaricata, subovato-oblonga, crassa, carnosa, granulata.*

We are obliged to Sir Abraham Hume for the specimen of this rare and curious Bindweed. There is no reason to suppose that the species has ever been introduced into Europe till now. Sir Abraham's gardener informs us, that the seed was received from the Isle of France; and was raised in the bark-bed of the hothouse at Wormleybury, where it has run up among and wound round the other plants. The flower opens either in the night or very early in the morning; finally closing about 4 or 5 o'clock in the afternoon. The plant, from which Willdenow instituted the species, was native of Guinea; the one preserved in the Banksian Herbarium is from the same quarter; in them the peduncles have sometimes 2 and even 3 flowers. In technical character our plant agrees very well with the

genus CALYSTEGIA of Mr. Brown, but the involucre is here smaller than the calyx, and the general habit of the plant is very different from that of the species which have been ranked there; so that we have thought it advisable to leave the species in the generic group where we have found it.

A villously furred annual plant. *Stem* herbaceous, round. *Leaves* cordately hastate, nearly three inches long, middle lobe ovately acuminate, cuspidate, lateral ones several times smaller, horizontal, very shortly ovate: *petiole* round, little shorter than the blades, nearly as thick as the branches. *Peduncles* solitary, 1-3 flowered much longer but slenderer than the petiole, longer than or about equal to the leaf, round, stiffish, sometimes twice or thrice divided at the top, with two oblongly acuminate *bractes* under each division: *pedicles* short. *Floral bractes* 2 under each flower, shorter than the calyx. *Calyx* foliaceous, large, unequal, villous, persistent, soft, recurvedly spreading, *two outer leaflets* by far the largest, equal to each other, broadly ovate, sharp pointed, opposite, nerved (mistaken by Willdenow for bractes?) 3 *inner ones* of the same shape as these, much smaller, and of different sizes from each other. *Corolla* pubescent on the outside, rotately funnelform; limb obsoletely 5-cornered. *Filaments* subulate, membranous and winged, flattish, subpubescent, very shallowly adnate to the tube, every one received behind at their union with the faux by two small obsolete teeth. *Anthers* pale, upright, sagittately linear, nearly as long as the filaments. *Pistil* equal to the calyx: *germen* shaggy, semibilocular, 4-seeded: *style* capillary, hairy, coloured, undivided: *stigmas* 2, lobeshaped, divaricate, subovately oblong, thick, fleshy, granulated.



IPOMŒA maritima.

Tropical Sea-shore Ipomœa.

PENTANDRIA *MONOGYNIA.*

Nat. ord. CONVOLVULI. *Jussieu gen.* 481.
CONVOLVULACEÆ. *Brown prod.* 481.
IPOMŒA. *Suprà vol.* I. *fol.* 9.

Div. II. Caulis repens v. prostratus. Folia indivisa integra v. incisa.

I. *maritima*, repens, glaberrima, foliis subrotundis emarginatis bilobisve crassiusculis basi subtùs biglandulosis, pedunculis 1 multifloris, calycibus obtusis: foliolis exterioribus brevioribus. *Brown prod.* 486.

Convolvulus maritimus. *Lamarck encyc.* 550.

Convolvulus Pes capræ. *Lin. sp. pl.* 1. 226. *Willd. sp. pl.* 1. 876. *Hort. Kew.* 1. 214. *ed.* 2. 1. 337.

Convolvulus brasiliensis. *Lin. sp. pl.* 1. 226. *Mill. dict. ed.* 8. *n.* 14. *Willd. sp. pl.* 1. 877. *Hort. Kew.* 1. 215. *ed.* 2. 1. 338.

C. maritimus zeylanicus, folio crasso cordiformi. *Herm. lugdb.* 174. *t.* 175.

C. marinus. *Rumph. amb.* 5. 433. *t.* 159. *f.* 1.

C. maritimus, foliis nitidis subrotundis emarginatis, petiolis biglandulosis. *Browne jam.* 153.

C. marinus catharticus, folio rotundo, flore purpureo. *Plum. amer.* 89. *t.* 104.

C. marinus s. Soldanella brasiliensis. *Marcgr. bras.* 51. *Pis. bras.* 258.

Schovanna-adamboe. *Rheede mal.* 11. 117. *t.* 57.

(α) foliis basi cuneiformibus. *Lamarck.*

(β) foliis binato-bilobis, transversis, basi subtruncatis. *Id.*

(γ) foliis majoribus, ovato-subrotundis levitèr emarginatis. *Id.*

Radix *perennis, sublignosa, repens, longissima, sæpè* 12*-pedalis, crassitie pollicis.* Caules *plerùmque* 3-*v.* 4*-pedales, interdùm tamen* 3*-orgyales, procumbentes, parùm ramosi, teretes, glabri.* Fol. *alterna, petiolata, suborbiculata, integerrima, emarginato-retusa, glaberrima, crassa, compacta, magnitudine palmæ.* Petioli *sæpiùs foliis longiores, suprà canaliculati, glabri, plerùmque rubri.* Glandulæ 2 *ad insertionem folii, in petiolo laterales, lineares s. quasi è rimâ rubrâ.* Pedunculi *axillares, solitarii, petiolis longiores, multiflori;* pedicellus *intermedius simplex, longior, uncialis et* 2*-uncialis lateralibus subdivisis.* Calycis *foliola ovata cum parvo acumine (post florescentiam obtusa), concava, glabra, erecta, æqualia, tubo corollæ duplo breviora (vix ½ uncialia), persistentia: post florescentiam capsulam amplexantia, illaque duplo breviora.* Cor. *è rubro-purpurascens.* Caps. *subglobosa, subtùs planiuscula, glabra, à basi ad medium calyce circumdata, diametro unguis pollicis,* 2*-loc.,* 4*-valv.* Dissepimentum *membranaceum, tenue.* Sem. 2 *in singulo loc., ovata, magna, extùs convexa, intùs angulata, fusca, villosa, angulis adhuc villosioribus.*

OBS. Caps. *interdùm* 3*-loc.;* sem. *tunc solitaria.* Solander in sched. banks. sub CONV. *brasiliensi.*

We have followed Messrs. Lamarck and Brown in considering the *Pes capræ* and the *brasiliensis* of Linnæus as one

species, and in combining the two under a new specific title. It seems to be a very general plant in the sands of the tropical shores of Asia and America. Mr. Brown found it in New Holland. It may be looked upon as holding the same place in the tropical regions, as CONVOLVULUS *Soldanella* does in the extratropical portion of our hemisphere. It is a rank growing creeping plant, and takes up too much room to be generally cultivated in our hothouses, where we believe it is seldom met with. We have to thank the Comtesse de Vandes for a specimen, which flowered this summer in her botanical establishment at Bayswater. The South American plant, usually described as 3-flowered, was introduced by Mr. Mark Catesby in 1726; the East Indian plant usually described as one-flowered by Mons. Richard in 1770. There is considerable variation in the size and outline of the foliage of the plants; but this is equally the case in several other species of the genus.

Root perennial, sublignescent, creeping, growing to a great length, often to 12 feet, of the thickness of a man's thumb. *Stems* generally 3 or 4 feet high, but sometimes twice the height of a man, trailing along the ground, with few branches, round, smooth. *Leaves* alternate, petioled, nearly orbicular, with a quite entire edge, emarginately retuse, very smooth, thick, close, about as large as the palm of the hand. *Petioles* usually longer than the blade, smooth, generally red. *Glands* 2, at the insertion of the leaf, on each side of the petiole, linear or almost as if from a red cleft. *Peduncles* axillary, solitary, longer than the petioles, many-flowered; *middle pedicle* simple, longer, 1-2 inches in length; *side ones* subdivided. Leaflets of the *calyx* ovate with a small point (obtuse after flowering), smooth, upright, equal, twice shorter than the tube of the corolla, persistent: embracing the twice higher capsule after flowering. *Corolla* purplish red. *Capsule* subglobular, flattish underneath, smooth, surrounded by the calyx from the base to the middle, about the diameter of the thumb nail, bilocular quadrivalvular. *Partition* thin, membranous. *Seeds* 2 in each cell, ovate, large, convex on the outer side, angular on the inner, brown, villous, with angles more thickly villous.

Pl. by E. Edwards, del. Pub. by J. Ridgway & Sons, 1st Feb. 1818.

CRASSULA versicolor.

Red and white Crassula.

PENTANDRIA *PENTAGYNIA.*

Nat. ord. SEMPERVIVÆ. *Jussieu gen.* 307.

CRASSULA. Cal. 5-partitus. *Cor.* 5-partita. *Caps.* 5. *Herbæ aut suffrutices; folia alterna aut opposita, interdùm connata, rariùs pinnata; flores terminales fasciculati aut corymbosi aut spicati. Species tubulosæ ad* COTYLEDONEM *repellendæ.* Id. loc. cit.

C. *versicolor*, erecta ramosa; foliis oblongo-lanceolatis cartilagineo-denticulatis basi connato-vaginantibus, umbellis geminato-multifloris.

Crassula versicolor. *Burchell MSS. ined.*

Caulis *infrà sublignescens, cæterùm carnosus, crassus, ad inflorescentiam usque foliosus, summitate brevitèr dichotomus ramo utroque florifero, nunc infrà ramosus.* Folia *decussato-opposita, compacta, decrescentia, erecto-patentia, rigidiuscula, glauco-virentia, opaca, elongato-oblonga, subulato-lanceolata, longiora subbiuncialia, latitudine maximùm subsemuncialia, crasso-carnosa, cartilagine minutâ ciliata, suprà planiuscula, subtùs convexiuscula, basi connato-vaginantia.* Inflor. *compactè umbellata, terminalis, subsessilis:* umbellæ *contiguo-geminatæ, multifloræ;* pedunculi *brevissimi, bracteati* bracteis *subtrinis appressis, foliaceis, lineari-lanceolatis, inæqualibus, brevioribus calyce;* flores *sesquiunciales, noctù odoratissimi.* Cal. ¾ *unciæ longus, herbaceus, cylindrico-connivens, angustus, crassus, ad usque longè infra medium partitus, segmentis lineari-lanceolatis, acuminatis, glanduloso-ciliatis, subviscidis.* Cor. *tubato-hypocrateriformis;* tubo *lineari-cylindraceo, altiore calyce, subvirescente;* limbo *albo et puniceo variante, recurvo-rotato, subtriplo breviore tubo:* pet. *linearispathulata,* ungue *erecto, virescente, angusto,* laminâ *ovali-oblongâ, obtusâ, albâ, extùs et ad latera et utrinque ad apicem puniceo-rubente.* Stam. *inclusa.* Anth. *erectæ, luteæ, oblongæ.* Pist. 5, *æqualia tubo, subulata, coadunata,* squamâ *minutâ ad singulorum basin.*

A beautiful unrecorded species; very recently introduced by Mr. Burchell, Junior, who informs us that it is native of the Cape of Good Hope, and that he believes the seed was collected on the Table Mountain. The only plants of it, at present in Europe, are at the nursery of Messrs. Colville, in the King's Road, Chelsea, where the drawing was taken in July last. None of these have yet attained more than a foot in height. They flower freely, and may be considered as rather hardy greenhouse plants. The blossom gives out, as we are told, a delightful fragrance in the night. The species is intermediate between *coccinea* and *odoratissima.*

Stem inclining to be woody at the base, fleshy upwards, thick, cloathed with foliage up to the inflorescence, often

purple in the short intervals, shallowly dichotomous at the top, each branch bearing flowers, sometimes branching below. *Leaves* decussately opposite, close, decrescent, uprightly spreading, stiffish, blucishly green, opaque, elongately oblong, subulately lanceolate, the longer ones about 2 inches long, about half an inch broad at the widest, thick, fleshy, ciliately edged with an exceedingly narrow fringed cartilage, flattish at the upper side, slightly convex at the under, connately sheathing at the base. *Inflorescence* compactly umbelled, terminal, subsessile: *umbels* contiguously twin, many-flowered; *peduncles* exceedingly short, bracteate; *bractes* about three, close-pressed, foliaceous, linearly lanceolate, unequal, shorter than the calyx; *flowers* about an inch and an half long. *Calyx* $\frac{3}{4}$ of an inch deep, herbaceous, converging cylindrically, narrow, thick, parted to far below the middle; segments linearly lanceolate, acuminate, glandularly ciliate, subviscous. *Corolla* narrowly hypocrateriform; *tube* linearly cylindrical, longer than the calyx, greenish; *limb* parti-coloured, white and crimson, recurvedly spreading, about 3 times shorter than the tube: *petals* linearly spatulate; *unguis* upright, green, narrow, *lamina* ovally oblong, obtuse. *Stamens* enclosed. *Anthers* upright, yellow, oblong. *Pistils* 5, equal to the tube, subulate, united, with a small *scale* at the base of each.

The crimson red of the corolla fades as the flower remains expanded.

PASSIFLORA fœtida.

Stinking Passionflower.

MONADELPHIA *PENTANDRIA.*

Nat. ord. PASSIFLOREÆ. *Jussieu in Annales du Muséum.* 6. 102.
PASSIFLORA. Suprà vol. 1. *fol.* 13.

P. *fœtida*, foliis trilobis cordatis pilosis, involucris multifido-capillaribus *Lin. amœn. acad.* 1. 228. *t.* 10. *f.* 17.
Passiflora fœtida. *Lin. sp. pl.* 2. 1359. *Mill. dict. ed.* 8. *n.* 7. *Gieseck. ic. fasc.* 1. *t.* 20. *Cavan. diss.* 10. 458. *t.* 289. *Miss Lawr. passionfl. Hort. Kew.* 3. 10. *ed.* 2. 4. 153.
Passiflora hirsuta. *Loddiges's botan. cabinet. (nec aliorum).*
Passiflora vesicaria, florum involucris triphyllis multifido-capillaribus. *Browne jam.* 327.
Flos passionis albus reticulatus. *Herm. par.* 173. *t.* 173.
Clematis indica hirsuta fœtida. *Plum. amer.* 71. *t.* 86.

Perennis, herbacea, suborgyalis, tota pilis erectis hirsuta. Fol. *distantia, longiora intervallis, mollia, flavo-virentia, triloba, cordato-hastata, subtriuncialia repando-subdentata, dentibus setulâ v. mucronulo herbaceo præfixis, lobis acuminatis, 5-nervia, subtùs pubescentiam translucentia:* petioli *eglandulosi, crassiusculi, subteretes, nervosi, duplo ferè breviores laminâ:* stipulæ *lato-semisagittatæ, herbaceæ, breves, ciliato-multifidæ.* Flores *axillares, subsolitarii, graveolentes, tenerrimi, fugacissimi, diametro* 2 *unciarum:* pedunculi *eglandulosi, filiformes, stricti, triplo graciliores at longiores petiolo, breviores folio, patentes.* Involucrum *flore majus, 3-phyllum, herbaceum, flavo-virens, calyci subcontiguum, patentissimum, lineari-multifidum.* Cal. *teneriusculus, basi intrusus, brevissimè urceolatus, externè virescens, internè albus, segmentis oblongis, obtusis, subtùs 3-nervibus, nervo medio carinato-prominente piloso cornuto-mucronato.* Pet. *alba, tenerrima, ore tubi calycis imposita, æqualia et conformia segmentis calycis.* Corona *radiato-patentissima, albo et violaceo variegata;* radii exteriores *biseriati, longiores, filiformes, flexuosi;* interiores *ad eorum pede positi, brevissimi, pluriseriati, subulati, compacti.* Nect. *subbicameratum:* septum exterius *pede columnæ enatum, subcoloratum, profundiusculum, integerrimum cum* operculo *brevi albo denticulato opposito inclinato-connivens.* Columna *flavo-virens, purpureo-punctata.* Styli *albicantes, patentissimi, clavati:* stig. *subglobosa, viridia, nutantia.* Germ. *ovatum, viride, glaberrimum, paulò majus stigmatibus.*

Native of the West Indies, cultivated by Miller at the Chelsea Physic garden in 1731. Generally accounted annual; but we are assured by Messrs. Whitley and Co. at whose nursery the drawing was taken in July last, that it is perennial. Requires to be kept in the stove. The whole plant, when touched, emits a rank herbaceous scent, resembling that of the Common Dead Nettle. Miller describes

the fruit as of a roundish oval form, and of the size of an ordinary Golden Pippin.

From 4 to 7 feet high, herbaceous, densely furred with upright hair. *Leaves* distant, soft, yellowish green, three-lobed, cordately hastate, about 3 inches long, repandly subdentate, the teeth headed by a small bristle or point, 5-nerved, shining through the pubescence at the under side, lobes acuminate: *petioles* glandless, thickish, roundish, nerved, nearly twice shorter than the blade: *stipules* broadly semisagittate, herbaceous, short, ciliately multifid. *Flowers* axillary, solitary, very tender, very fugacious, about 2 inches over: *peduncles* glandless, filiform, stiff, 3 times slenderer but longer than the petiole, shorter than the leaf, spreading. *Involucre* herbaceous, larger than the flower, of three leaflets, yellowish green, very close to the calyx. *Calyx* rather tender, dinted at the base, very shallowly urceolate, greenish on the outside, white on the inside; segments oblong, obtuse, 3-nerved underneath, with the middle nerve carinately prominent hairy and terminating in a hornshaped point. *Petals* very tender, all white, placed at the mouth of the tube of the calyx, equal to and of the same shape as the segments of that. *Crown* radiantly outspread, variegated with white and violet: *outer rays* of two rows, longest, filiform, flexuose; *inner ones* placed at their base, very short, of several rows, subulate, compact. *Nectary* slightly two-chambered: *outer wall* springing from the foot of the shaft of the fructification, slightly coloured, deepish, quite entire, converging obliquely towards the short white denticulated *operculum* or *cover*. *Shaft of the fructification* yellowish green, dotted with purple. *Styles* whitish, widespread, clavate: *stigmas* nearly globular, green, nutant. *Germen* ovate, green, quite smooth, but little larger than the stigmas.

In the West Indies it is called "Love in a Mist," from the appearance of the unexpanded flower when enclosed in its curiously feathered involucre.

Sydenham Edwards del. Pub. by J. Ridgway & Sons. 170. Piccadilly. Dec. 1. 1812. Smith. Sc.

CONVOLVULUS chinensis.

Sir George Staunton's Bindweed.

PENTANDRIA *MONOGYNIA.*

Nat. ord. CONVOLVULI. *Jussieu gen.* 132.
CONVOLVULACEÆ. *Brown prod.* 481.
CONVOLVULUS. Suprà vol. 2. fol. 133.

C. *chinensis*, caule tortili, subsimplici, anguloso-striato, foliis secundis, carnosulis, hastatis; auriculis edentatis; pedunculis solitariis, crassiusculis, firmis, longioribus folio.

Convolvulus japonicus. *Herb. Banks. Exemplar nativum Chinâ in provinciâ Pechelee à Sir George Staunton lectum. Dubitatur verò an sit idem cum* CONVOLVULO japonico *Thunbergii, ob auriculas foliorum integerrimas neque unidentatas, ac hæ in eo dictæ sunt. Certissimè tamen nostra species. Proximè affinis* CONVOLVULO arvensi. *Perennis, 2-3-pedalis, radice repente.* Fol. *firmula, glauciuscula v. cinerascentia, decrescentia, hastata, lobo medio elongato-oblongo, subattenuato, obtuso mucronato, unciali v. ultrà, auriculis divaricatis brevibus integerrimis:* pet. *linearis, canaliculatus, 3plo brevior laminâ v. ultrà.* Flores *in caule superni, axillares, solitarii, secundi,* pedunculis *patentibus, nunc subbiuncialibus:* bracteæ 2, *parvulæ, oppositæ, lineari-subulatæ, flore remotæ.* Cal. *virescens, cartilagineo-membranaceus, multotiès brevior corollâ, subæqualis, vix ¼ unciæ altus, imbricato-connivens,* foliolis *obcordato-oblongiusculis, ellipticis, retusis, glabris.* Cor. *rotato-infundibuliformis;* limbus *amplus, purpureo-punicans, disco pictus stellâ inæquali subluteo halone purpureo-radiante cinctâ:* tubus *æqualis calyci:* faux *brevis.* Stam. *exserta fauce:* fil. *subulata margini interiori baseos tubi brevissimè annexa, glanduloso-villosa, intùs infernè canaliculata, quater plusve longiora antheris:* anth. *oblongæ, sagittatæ, angustæ, marginibus atro-rubentes:* pollen *albidum.* Germ. *parvum, conicum, glabrum, insidens disco crasso latiore aurantiaco-flavescente:* stylus *capillaris, glaber:* stigmata *lineari-teretia, ochroleuca, divaricata.*

We find in the Banksian Herbarium a specimen of this species, gathered in China, in the province of Pechelee, by Sir George Staunton, Secretary to Lord Macartney, during the embassy to the Chinese Court. In a note at the foot of the specimen, it is suggested that it may probably be the same with the CONVOLVULUS *japonicus* of Thunberg; but as we do not find the plant to agree completely with the very short account we have of that species, the lobes or earlets of the leaves being quite entire in our sample, and not augmented with the tooth, which is ascribed to those of the leaves of the *japonicus*, we have thought it safer to publish it by a distinct specific title. We are clear it is not the

plant of Kæmpfer, quoted by Thunberg as a synonym to his *japonicus*. But this of itself proves little; as we find Kæmpfer's plants not unfrequently quoted rather too loosely in the synonymy of the above respectable and meritorious author.

Very lately introduced by Messrs. Whitley and Co. into their nursery at Fulham; where it was raised from seed received by the way of Berlin, from the botanic garden at Moscow, and is probably native of some of the parts of the Russian dominions which border upon the Chinese territory. It comes extremely close to our common Field-Bindweed (C. *arvensis)*, but differs in the thicker substance, hastate form of the foliage, and larger deeper-coloured corolla. Quite hardy, and seems to have taken fast hold of the borders in the Fulham nursery by its vivacious creeping root. We do not believe it is in any other collection. The flower opens either in the night or betimes in the morning, and fades early in the forenoon.

Perennial, 2-3 feet high. Root creeping. *Leaves* firm, subcoriaceous, greyish green, hastate, middle lobe elongatedly oblong, somewhat tapered, blunt, with a small point, an inch or more long, side ones or auricles divaricate, short, quite entire: *petiole* linear, channelled, 3 times shorter than the blade. *Flowers* at the upper part of the stem, axillary, solitary, pointing one way: *peduncles* spreading, sometimes about two inches long: *bractes* 2, small opposite, linearly subulate, at a distance from the flower. *Calyx* greenish, cartilagineo-membranous, many times shorter than the corolla, nearly equal, scarcely $\frac{1}{4}$ of an inch deep, imbricately connivent; *leaflets* obcordately oblong, elliptical, retuse, smooth. *Corolla* rotately funnelform; *limb* large, purplish crimson, marked in the disk with an unequally pointed pale yellow star surrounded by a purple radiant halo: *tube* the length of the calyx; *faux* short. *Stamens* protruding beyond the faux: *filaments* subulate, attached to the inner edge of the base of the tube, channelled inwards below, glandularly villous, 4 times longer than the anthers or more: *anthers* oblong, sagittate, narrow, blackish red at the sides. *Germen* small, conical, smooth, seated upon a thick roundish depressed far wider orange-coloured disk.

G.J. Cruickshanks del. Pub.d by S. Rodwell & Sons 17 C. Piccadilly. Nov.r 1. 1818. Pinxit.

RHEXIA holosericea.

Velvet-leaved Rhexia.

OCTANDRIA (DECANDRIA) *MONOGYNIA.*

Nat. ord. MELASTOMÆ *(recentiùs* MELASTOMACEÆ). *Jussieu gen.* 328. *Div. II.*

RHEXIA. Cal. cum germine, et dein cum capsulâ partìm v. omninò conferruminatus (v. germine et capsulâ liberus). *Pet.* 4-5-6. *Stam.* 8-10-12, omninò libera. *Caps.* sicca, calyce obtecta. *Sem.* plurima receptaculis axi centrali adhærentibus, et in unoquoque loculo singulis inserta. *Ventenat in mém. de l'inst.* 1807. 8. 11. *(sub* MERIANA et RHEXIA).

R. *holosericea*, foliis subcordato-ovalibus, utrinque sericeo-tomentosis, 7-nerviis, sessilibus: paniculâ terminali: floribus bracteaceis decandris. *Humb. et Bonpl. Rhexia.* 29. *t.* 12.

Melastoma argentea. *Lamarck encyc.* 4. 45.

Frutex 10-*pedalis*, *sericeo-tomentosus (sericeo-pilosus).* Rami *oppositi, acuti, tetragoni.* Fol. *approximata, patentia, sessilia, subcordata, ovalia, crassa, utrinque sericeo-tomentosa pilis densissimis incumbentibus*, 7-9-*nervia, integerrima.* Florum panicula *(brachiata) terminalis ramulis plerùmque trifidis composita.* Flores *violaceo-purpurei bracteati.* Bracteæ 3 *v.* 2 *calycis longitudine, oblongæ, sericeæ, singulis fasciculis florum, caducæ.* Cal. *tubulosus, sericeo-villosus*, 5-*fidus, laciniis tubo brevioribus, internè glabris.* Pet. 5, *obovata, calyci paululùm longiora, patentia, internè glabra, externè pilosa.* Stam. 10, *corollâ longiora:* fil. *concolora petalis, introrsùm arcuata, ad apicem infra antheram tuberculis* 2 *appendiculata:* anth. *lineares, basi affixæ.* Germ. *oblongo-ovatum, dentibus* 5 *villosissimis umbilicatum*, 5-*valv.*, 5-*loc.*, *polysperma.* Bonpl. loc. cit.

Though very lately introduced into our collections, this fine plant had been long since observed both by Commerson and Sir Joseph Banks, while growing on its native spot near Rio Janeiro in Brazil, and samples are preserved in each of their Herbariums. The species had not been noticed in any publication, until taken up from Commersón's specimen by the Chev'. de Lamarck, in his valuable Encyclopédie Botanique. It has been since described and figured from the dried plant, in the splendid Monograph of this genus by Monsieur Bonpland. We are not to confound it with the MELASTOMA *sericea* of the works of Linnæus and his editors, where, as Mr. Dryander observes, a very different species is manifestly intended, though it so happens that a sample of the present stands in the Linnæan Herbarium under that very title. Nor has our plant any thing

to do with the MELASTOMA *argentea* of Willdenow and Persoon.

We are obliged to Sir Abraham Hume for the opportunity of making this drawing. The plant flowered in July last, for the first time, in the hothouse at Wormleybury. We have seen it in several of the principal nurseries about town.

Monsieur Bonpland not having framed any character for the genus, we have adopted one from Ventenat, uniting however his MERIANA with his RHEXIA.

A shrub of about ten feet high, cloathed with a white silkily tomentose fur. *Branches* opposite, sharply four-cornered. *Leaves* opposite, spreading, sessile, subcordate, oval, thick, silkily tomentose on both sides, with very dense incumbent hair, 7-9-nerved, quite entire. *Panicle* brachiate, terminal, composed of branchlets which are in general trifid. *Flowers* violet-purple, bracteate, about an inch in diameter. *Bractes* 3 or 2, of the length of the calyx, silky, placed under each of the floral fascicles, caducous. *Calyx* tubular, not unaptly likened by Lamarck to the form of a Clove, silkily villous, fivecleft; *segments* shorter than the tubular part, smooth on the inside. *Petals* 5, obovate, a little longer than the calyx, spreading, smooth on the inside, hairy on the outside. *Stamens* ten, longer than the corolla: *filaments* of the colour of the petals, bowed inwards, having two small tubercles at the top below the anther: *anthers* linear, falcate, fixed on at their base. *Germen* oblongly ovate, with an umbilicus of 5 very villous teeth, 5-valved, 5-celled, many-seeded. We have depended upon Monsieur Bonpland for the description, which was taken from the dried plant, as well as the figure we have cited from his work.

Pub.by J. Badgeway

DISA bracteata.

Small-flowered Disa.

GYNANDRIA *MONANDRIA.*

Nat. ord. ORCHIDEÆ. *Jussieu gen.* 64. *Brown prod.* 309. *Div. I. Anthera* adnata subterminalis persistens. *Pollinis massæ* è lobulis angulatis elasticè cohærentibus; basi affixæ. *Brown in Hort. Kew. ed.* 2. 5. 188.
DISA. Suprà vol. 3. *fol.* 210.

Div. Calcare longiore.

D. *bracteata*, galeâ obtusâ, calcare oblongo, labello lineari apice latiore, spicâ cylindricâ, bracteis erectis floribus longioribus. *Swartz act. holm.* 1800. 211.

Disa bracteata. *Willd. sp. pl.* 4. 48. *Swartz in Schrader's neues journ. fur die bot.* 1. 28. *Exemp. spont. in Herb. Banks. repostum.*

Planta *spithamæa.* Tuber *subrotundum.* Folia *caulina plura* (5-6) *lanceolata erecta concaviuscula.* Spica *multiflora bipollicaris.* Bracteæ *altitudine circitèr florum, foliaceæ, lanceolatæ acumine brevi.* Germ. *cylindraceum tortum in flore expanso, subsessile.* Flores *parvi, luteo-virides galeâ pallidè fuscâ, erecti.* Galea *erecta ovalis obtusa modicè concava,* calcari *ipsâ galeâ ter breviore descendenti obtuso fusco.* Petala 2 inferiora exteriora *arctè reflexa lanceolato-subovata acutiuscula plana:* interiorum 2 superiora *crassiuscula, conniventia lanceolato-linearia viridia basin versus sensim latiora ibique columnæ latera amplexantia apice lineari integro citiùs marcescente.* Labellum *lingulato-lineare obtusum integerrimum planum dependens primùm viride deindè superiore parte citiùs marcescente.* Brown MSS.

Of the four or five species, of this curious South African genus, introduced into the gardens of Europe, two are due to Mr. Griffin; viz. the present and the *prasinata* of the 210th article of this publication.

We have to thank Mr. Brown for his very liberal communication of a description of the plant made by himself at South Lambeth, where it was in flower in June last in the conservatory, the root having been very recently received by Mr. Griffin from the Cape of Good Hope.

Our only guide to the species intended by Swartz by his DISA *bracteata* is the above short specific phrase, unaccompanied by any note: with this our plant, however, in Mr. Brown's opinion, agrees too closely to justify a separation; and being moreover clearly of the same species with the specimen in the Banksian Herbarium, deemed to be the *bracteata* of Swartz, we have no hesitation in giving it under the present title.

Plant a span in height. *Tuber* roundish. *Leaves* cauline, several (5-6) lanceolate upright slightly concave. *Spike* manyflowered two inches long. *Bractes* about the height (a little higher) than the flower; foliaceous, lanceolate with a short point. *Germen* cylindrical, twisted when the flower is expanded, subsessile. *Flowers* small, yellowish-green with a pale brown casque, upright. *Casque* upright oval obtuse moderately concave, with a *spur* three times shorter than the casque itself inclining downwards obtuse brown. *Two lower outside petals* closely reflected lanceolately-subovate rather pointed flat: *two inner upper ones* thickish connivent lanceolately linear green gradually broader towards the base, where they embrace the column of the fructification, the top part linear entire withering before the lower portion. *Label* lingulately linear obtuse quite entire flat dependent, at first green, afterwards decaying earlier at the upper part than the other.

MAGNOLIA cordata.

Heart-leaved Magnolia.

POLYANDRIA *POLYGYNIA.*

Nat. ord. MAGNOLIACEÆ. *Decand. Syst. Nat.* 439.

MAGNOLIA. Cal. 3-phyllus, deciduus, interdùm nullus (foliolis forsàn omninò petaloideis et pro petalis externis habitis). *Pet.* 6-12, bi-triquadruplicive ordine disposita, decidua. *Anth.* extrorsæ. *Caps.* indefinitæ spicatìm secùs rachin cylindricam in conum imbricatæ, liberæ, 2-valves, 2-spermæ, extrorsùm dehiscentes. *Sem.* baccata, subcordata, funiculi umbilicalis longissimi ope extrà capsulam pendula. *Arbores pulcherrimæ, fol. integra; stipulæ* 2 *oppositæ, folia juniora tegentes, in gemmam acuminatam convolutæ, citò caducæ; flores ad apices ramorum terminales, solitarii, brevitèr pedunculati; bracteâ unicâ lateralitèr fissa aut* 2 *oppositæ alabastrum includentes mox caducæ et lineam circularem super pediculum, ut stipulæ secus ramulos, relinquentes.* Decand. l. c. 449.

M. *cordata*, foliis deciduis cordiformibus subovatis acutis subtùs subtomentosis suprà lævibus, petalis 6-9 oblongis. *Decand. loc. cit.* 455.

Magnolia cordata. *Michaux bor. amer.* 1. 328. *Ejusd. fil. arb.* 3. 87. *t.* 4. *Pursh amer. sept.* 2. 382. *Hort. Kew. ed.* 2. 3. 331.

Arbor 40 50 *pedes alta.* Rami *teretes, fusci, tactui asperiusculi; novelli villosi, medullâ crassâ rufescente.* Fol. *elliptico-ovata, acuta, seniora infrà cordata, suprà obsoletiùs lanuginosa, nitentia, subtùs brevi tomento pallentia, nervis plurimis obliquis,* 5-6-*uncialia latitudine subtriunciali:* petiolus *teres, villosus, subuncialis.* Stipulæ *membranosæ, sesquiunciales, villosæ, pallidæ, figura ferè foliolorum calycinorum, caducæ.* Pedunculi *uniflori, terminales, breviores petiolo, crassi, atomoideo-punctati, paulò infra florem cicatrice circulari notati.* Flos *diametro ultra* 4-*uncialem, glauco-flavescens, erectus, subodoratus.* Cal. *ultra duplum breviore petalis, foliolis* 3 *lineari-oblongis cum brevi acumine, petalorum subconcolora, teneriora verò et caduca.* Pet. 6, *flaccida, cuneato-obovata, cum brevi acumine, alterna aliquantulùm angustiora, forisque magis virentia.*

One of the rarer species of this magnificent genus. Introduced in 1801, by Messrs. Frasers, of the Sloane Square Nursery, from North America, where it is found chiefly in Carolina and Georgia. Quite hardy, and thriving with the treatment of the more common sorts. Said to acquire the height of 40 or 50 feet in its native soil; but with us it is still a mere shrub in size. The drawing was taken from a plant that flowered in the fine collection of Mr. Vere, at Kensington Gore. We had also a specimen from Messrs. Whitley and Co. of the Fulham Nursery.

Eighteen species are now recorded; 9 from North Ame-

rica, and an equal number which belong to India, Japan, or China.

Branches round, brown, roughish to the feel: young ones villous, with a thick reddish pith. *Leaves* elliptically ovate, pointed, older ones cordate at the base, obsoletely downy above and shining, coated underneath with a short thick downy nap, and hence opaque and pale, 5-6 inches long, about 3 broad, with many slanting nerves, deciduous: *petiole* round, villous, about an inch long. *Stipules* membranous, an inch and an half long, pale villous, of nearly the same shape as the leaflets of the calyx, caducous. *Peduncles* oneflowered, terminal, shorter than the petiole, thick, finely dotted, marked with a circular scar a little below the flower. *Flower* more than 4 inches in diameter, of yellowish buff colour with a slight glaucous tint, upright, very faintly odorous. *Calyx* more than twice shorter than the petals; *leaflets* 3, linearly oblong, with a short point, nearly of the same colour as the petals, but tenderer and caducous. *Petals* 6, flaccid, cuneately obovate, with a short point, alternate ones rather narrower, and greener on the outside.

There had been doubts, whether the Asiatic species would prove to be true MAGNOLIÆ, when their fruit was examined. The examination has been lately made by Mr. Brown, who finds that the fruit of Asiatic species, in the Banksian Herbarium, does not differ essentially from the fruit of the American ones.

Sowerby del. Published by J. Ridgway & Sons, 170 Piccadilly. Jan. 1st 1806. Smith sc.

GALEGA orientalis.

Oriental Galega.

DIADELPHIA *DECANDRIA.*

Nat. ord. LEGUMINOSÆ. *Jussieu gen.* 345. *Div. VI.*

GALEGA. Cal. tubulosus 5-dentatus dentibus subulatis subæqualibus. *Legumen* oblongum rectum subcompressum, polyspermum ad singula semina sæpè nodosum, inter eadem obliquè striatum aut transversìm sulcatum. *Frutices aut sæpiùs herbæ, quædam tinctoriæ; stipulæ à petiolo distinctæ; flores spicati axillares et terminales.* Jussieu loc. cit. 359.

Div. Foliis pinnatis.

G. *orientalis,* foliis pinnatis, foliolis ovatis acuminatis glabris, stipulis ovatis, floribus cernuis. *Willd. sp. pl.* 3. 1241.

Galega orientalis. *Lamarck encyc.* 2. 589. *Hort. Kew. ed.* 2. 4. 355. *Marsch. Bieb. taur. cauc.* 2. 182.

Galega orientalis latifolia, altissima, flore cæruleo. *Tournef. cor.* 27; *cujus specimen archetypum in Herb. Banks. videndum est.*

Herba *perennis.* Caulis *4-pedalis, erectus, flexuosus, foliosus:* rami *fistulosi, teretes, villosi, striatuli, ascendentes.* Fol. *impari-pinnata, ampla, sub5juga, sessilia, subtùs et ad petiolum communem villosa, suprà glabra, ciliolata, venosa,* foliolis *ovato-lanceolatis, subsessilibus, duplo ferè longioribus intervallis, longitudine nunc biunciali latitudine subunciali, acuminatissimis, nervis laterum ascendentibus, ramosis.* Stipulæ *geminæ, magnæ, ovatæ, breviùs subacutæ, integræ subsemiamplexicaules, nervosæ, subtùs villosæ, suprà glabræ.* Racemi *longi, laxiùs multiflori, erecti, terminales et axillares;* floribus *cernuis;* pedunculo *capitato-villoso;* pedicellis *flexilibus, gracillimis, brevioribus corollâ, longioribus calyce.* Bracteæ *angustæ, lineares, acutæ, capitato-villosæ, longitudine ferè pedicellorum, erectæ.* Cal. *capitato-villosus, duplo brevior corollâ v. ultra.* Stigma *parvulum, capitellatum.* Legumina *cernua.*

This species was first recorded by Tournefort, by whom it was observed during his travels in the Levant, where it is native. It was afterwards described from the specimen of that naturalist by the Chevalier de Lamarck, in his excellent Encyclopédie Botanique, and thence transferred by Willdenow into his edition of the Species Plantarum. A sample gathered by Tournefort, and which formed a part of his Herbarium, is now deposited in that of Sir Joseph Banks, by whom the plant was introduced into this country in 1801. It may be easily known from *officinalis,* by the greater size of its foliage and stipules, and by its nodding flowers and pendulous pods. The leaves remind us of those

of some of the Orobi, but have odd paired leaflets, while those of the Orobi have even paired leaflets.

The specimen from which the drawing has been made, was sent us by Mr. Biggs, the curator of the Botanic Garden at Cambridge. The plant is far from common in our collections; though we believe quite hardy. Flowers from June to August. Said by Mr. Marschal von Bieberstein, to be abundant in the forests of the subalpine regions of Mount-Caucasus.

A perennial herbaceous plant. *Stem* 4 feet high, upright, flexuose, leafy: *branches* hollow, round, villous, streaked, ascendent. *Leaves* unevenly pinnate, large, about 5-paired, sessile, underneath and on the common petiole villous, smooth above, slightly ciliated, veiny; *leaflets* ovately lanceolate, subsessile, nearly twice longer than the intervals, sometimes two inches in length and one in breadth, acuminate, side nerves ascendent, branching. *Stipules* in pairs, opposite, large, ovate, shortly pointed, entire, about halfstemclasping, nerved, villous underneath, smooth above. *Racemes* long, loosely manyflowered, upright, terminal and axillary; *flowers* cernuous; *peduncle* capitately villous; *pedicles* flexile, very slender, shorter than the corolla, longer than the calyx. *Bractes* narrow, linear, pointed, capitately villous, about the length of the pedicles, upright. *Calyx* capitately villous, twice shorter than the corolla or more. *Stigma* small, headed. *Pods* cernuous.

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DELPHINIUM cuneatum.

Wolga Larkspur.

POLYANDRIA *TRIGYNIA.*

Nat. ord. RANUNCULACEÆ. *Decand. syst. nat.* 1. 129. *Div. I.* Ranunculaceæ Veræ. *Tribus IV.* Helleboreæ.

DELPHINIUM. Cal. coloratus 5-phyllus, foliolo superiore basi in calcar cavum producto. *Pet.* 4, interdùm inter se coalita, 2 sup. basi in appendices intra calcar contentas (calcar internum) producta. *Germ.* 1-5, sæpiùs 3. *Capss.* totidem distinctæ 1-valv. folliculares. *Sem.* indefinita aridobaccata. *Herbæ radice annuâ exili aut perenni sub fasciculatâ donatæ;* caules *erecti ramosi;* fol. *petiolata caulina palmatìm multifida;* flores *racemosi, sæpiùs cærulei aut albi rosei et variantes purpurei, in* 1 *specie flavi;* bracteæ 3 *ad singulum pedicellum,* 1 *sub basi* (bractea), 2 *secùs pedicellum* (bracteolæ) *sæpiùs oppositæ, nunc ad basin ut in* D. Staphisagriâ, *nunc in medio pedicelli ut in* D. Requienii, *nunc circa apicem ut in* Delphinastris. Dec. l. c. 340.

Sect. III. Delphinastrum. *Subd.* 2. *Petalorum inferiorum limbo* 2-*fido.*

D. *cuneatum,* petiolis basi non dilatatis, foliis basi cuneatis 5-7-lobatis, lobis incisis acutis, racemo laxo ramoso, bracteolis calycibusque glabris, capsulis subpubescentibus. *Dec. l. c.* 359.

Delphinium cuneatum. *Stev. diss. ined. Sweet hort. lond.* 231. *in add.*
Delphinium azureum. *Hort. paris. (non Michauxii).*
Delphinium elatum β. *Lamarck encyc.* 2. 265.
Delphinium hybridum. *Herb. Linn. (non aliorum).*
(β) pubiflorum. *Dec. l. c. in add.* 546.

Planta elata 3-4-*pedalis; caulis erectus apice ramoso-paniculatus,* fol. *petiolata,* petiolo *basi non dilatato,* limbo *basi cuneiformi-attenuato irregulariter ultra medium* 3-5-*lobato, lobis oblongis acuminatis incisis fissisve;* racemi *longi laxi ramosi;* bract. *subulatæ tenuissimæ glabræ pedicellis breviores;* bracteolæ *glabræ flori adpressæ:* cal^s. *glabri pulchrè cærulei;* calcar *horizontale rectum calycis longitudine;* pet. *fusca,* 2 *sup. glabra apice integra,* 2 inf. 2-*fida pilis flavis barbata;* germm. *glabra aut pilis raris pubescentia. Variat superficie omninò glabrâ et tenuissimè velutino pubescente.* β. *Spontaneum circa Saratof lectum, hortensibus differt pedicellis bracteolis calycibus imò capsulis junioribus pube densâ tenui velutinis.* Dec. l. c. et in add.

Fifty species of this genus have been distinguished in *Systema Naturale Regni Vegetabilis* of Monsieur Decandolle. They belong to the northern hemisphere, and are common to the old and new continents; six of the species only, however, falling to the share of America.

The present is the *hybridum* of the Linnean and Banksian Herbariums, but not of the works of Willdenow or Marschal

von Bieberstein. By the Chevalier de Lamarck it was recorded as a variety of *elatum*. Subsequent observations have decided its specific distinction. We do not find it in the Hortus Kewensis. In Sweet's Hortus Suburbanus Londinensis, it is inserted in the Appendix; and is stated to have been introduced in 1815. We have never seen it in any other collection than in that of Messrs. Whitley and Co. of the Fulham nursery, where the drawing was taken in June last. A hardy and very ornamental perennial. Grows naturally in the Russian dominions, in the neighbourhood of Saratof, on the banks of the lower Wolga.

The present is a straight plant of about 3 or 4 feet high; *stem* upright, branchingly panicled at the top; *leaves* petioled; *petiole* not undulated at the base; *blade* cuneately tapered at the base (or rather at the base of the lobes), irregularly 5-lobed to beyond the middle; *lobes* oblong, acuminate, incisively scored or cleft; *racemes* long loose branching; *bractes* subulate, very thin, smooth, shorter than the pedicles; *bractelets* smooth pressed close to the flower; *calyxes* smooth, of a beautiful blue; *spur* horizontal, straight, the length of the calyx; *petals* brown, 2 *upper ones* smooth entire at the top, 2 *lower ones* bifid bearded with deep-yellow hairs; *germens* smooth or else covered with a thin pubescence. The plant varies with an entirely smooth surface, and one that is very finely velvetted. A spontaneous specimen sent from Saratof to Monsieur Decandolle, differed from the garden ones, in having the pedicles, bractelets, calyxes, and even the capsules, in a younger stage, covered with a fine dense velvet-like pubescence.

ALPINIA malaccensis.

Petiolate Alpinia.

MONANDRIA *MONOGYNIA.*

Nat. ord. CANNÆ. *Jussieu gen.* 62.
SCITAMINEÆ. *Brown prod.* 305.
ALPINIA. Suprà vol. 2. *fol.* 141.

A. *malaccensis*, foliis lanceolatis, petiolatis, subtùs villosis: racemis terminalibus, simplicibus. Labello transversìm latiore, obsoletè trilobo, lobis in tubum involuto-conniventibus. *Roxb. in asiat. res.* 11. 353.
Alpinia malaccensis. *Roscoe in trans. linn. soc.* 8. 345.
Alpinia petiolaris. *Solander in sched. banks. et ad specimen in Horto kewensi floridum herbarioque banksiano repostum.*
Renealmia sumatrana. *Donn cant. ed.* 8. 2.
Maranta malaccensis. *Burm. ind.* 2. *Willd. sp. pl.* 1. 14.
Galanga malaccensis. *Rumph. amb.* 5. 176. *t.* 71. *fig.* 1.
Daun Andong. Patjing. *Malayensibus.*

Caules *simplices, erecti, teretes, vaginis foliorum vestiti, supernè villosi,* 5-8 *pedes alti.* Fol. *alterna, petiolata, ovato-oblonga, elliptica, acuminata, integerrima, suprà glabra, subtùs villosa,* 2-*pedalia, prædita nervis numerosissimis, tenuissimis, ad angulum acutum convergentibus.* Petioli *suprà canaliculati, palmares.* Racemus *terminalis, simplex, spicæformis, subcylindraceus, multiflorus, pedalis.* Pedicelli *uniflori, breves,* 2 *v.* 3 *lineas longi, subæquales, villosi.* Spatha *infera, oblongo-ovata, ventricosa, glabra, nivea, unciam longa, bipartita:* Laciniæ *ovatæ, acutæ: apicibus rubicundis.* Perianthium *superum, monophyllum, tubulosum, infernè gibbosum, glabrum, album, altitudine spathæ, basin corollæ arctè involvens, marcescenti-persistens, apice trifidum:* Laciniæ *ovatæ, acuminatæ, apice rubicundæ.* Cor. exterior *monopetala, albida, sesquiuncialis.* Tubus *cylindraceus, erectus, glaber, semuncialis.* Limbus *deflexus,* 3-*partitus:* Laciniæ *oblongæ, obtusæ, extùs villosæ, sericeæ: suprema reliquis paulò latior:* cor. interior (labellum) *monophylla, longior exteriore, basi in tubum contracta, fauci exterioris adnata, deìn dilatata et tandem expansa in* Laminam *magnam, subrotundam, margine undulatam, apice in lobis* 2 *oblongis* (4 *lineas longis*) *productam sursùm inclinatam; intùs rubram punctis lineolisque interruptis luteis irroratam: extùs lutescentem lineis paucis rubris ornatam.* Fil. 1, *tubo corollæ interioris (labelli) sub laciniâ superiore exterioris insertum, crassum, latiusculum, supernè pro antherâ dilatatum, albidum, longitudine corollæ.* Anth. *maxima, adnata, longitudinalitèr bipartita, apice bifida, albida.* Germ. *inferum, globosum, villosum.* Stylus *filiformis, tenuis, longitudine staminis, filamento adpressus, inter lobos antheræ supernè inclusus.* Stigma *capitatum, compressum, album.* Caps. *globosa, villosa, crassiuscula,* 3-*loc.* (*fortè etiàm* 3-*valv.*). Sem. *nonnulla, subrotunda, angulata.* Solander in sched. banks. sub ALPINIA *petiolari.*

In Dr. Roxburgh's opinion this is the most stately of all the scitamineous plants of India, not excepting the *nutans*

of the same generic group, so long considered as a chief ornament of our stoves. We do not find the species recorded in the Kew Catalogue; but we find a specimen in the Banksian Herbarium, which is stated to have flowered in the garden at Kew. We believe the plant to be exceedingly rare with us, and never heard of its flowering in this country, except at Kew, till we were favoured with the present sample by Mr. Fawkes; who had the kindness to send it us from Farnley Hall, his seat in Yorkshire; where it blossomed in the hothouse during the present summer.

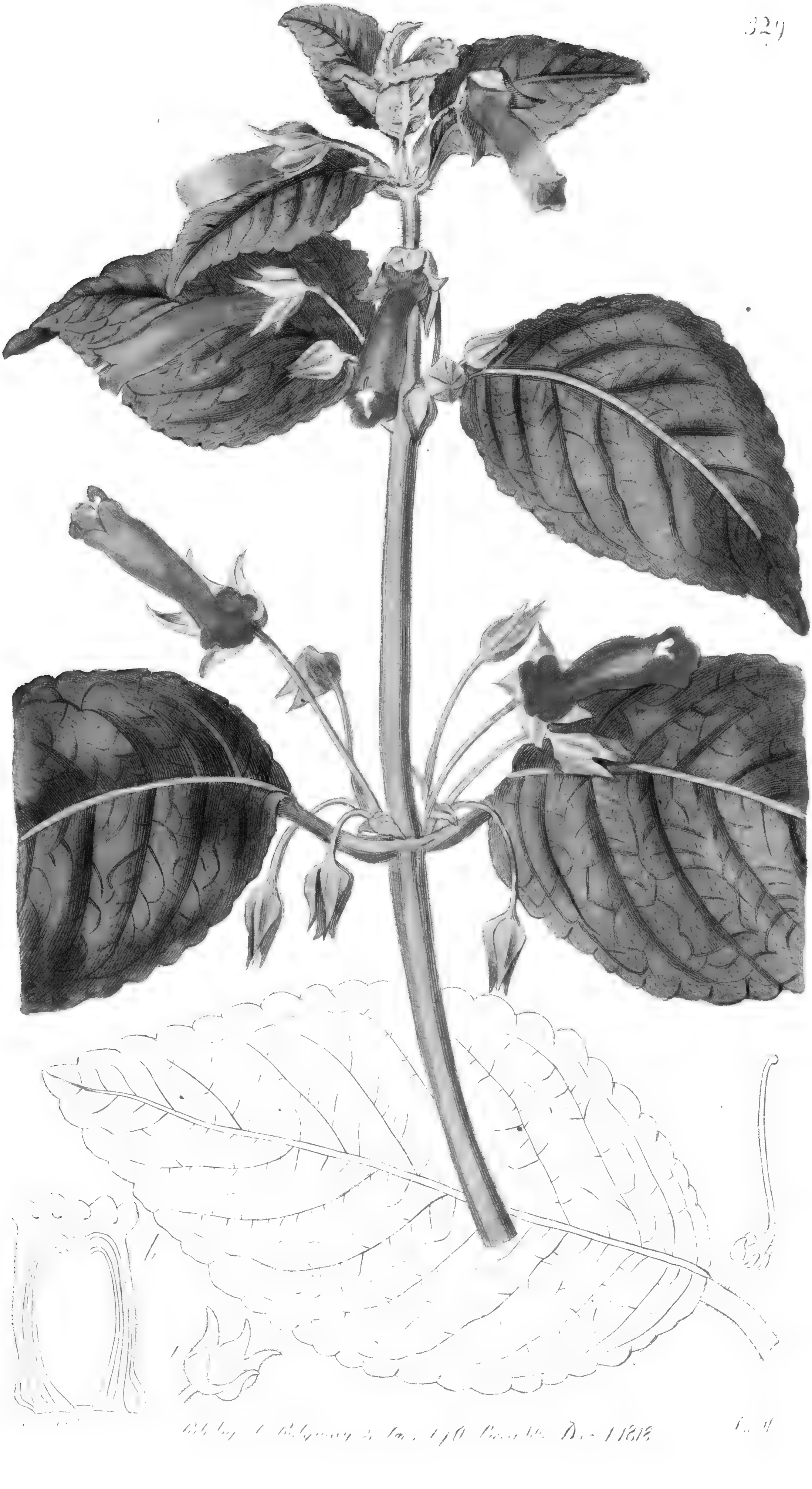
According to Dr. Roxburgh, a native of Chittagong. According to others, of Java also. We have no authority for the time of its introduction.

Stems simple, upright, round, covered by the sheaths of the foliage, villous at the upper part, from 5 to 8 feet high. *Leaves* alternate, petiolate, ovately oblong, elliptical, acuminate, quite entire, smooth on the upper side, villous on the under, 2 feet long, furnished with very numerous fine nerves which converge at an acute angle. *Petioles* channelled at the upper side, a palm long. *Raceme* terminal, simple, subcylindrical, spikeformed, manyflowered, a foot long. *Pedicles* oneflowered, short, 2 or 3 lines long, nearly of one length, villous. *Spathe* inferior, oblongly ovate, ventricose, smooth, snow-white, an inch long, 2-parted: *segments* ovate, sharp pointed: the tips reddish. *Calyx* superior, of one piece, tubular, gibbous below, smooth, white, the depth of the spathe, surrounding the base of the corolla closely, withering but persistent, trifid at the tip: *segments* ovate, acuminate, reddish at the top. *Outer corolla* of one petal, white, an inch and an half long. *Tube* cylindrical, upright, smooth, half an inch long. *Limb* deflectent, 3-parted: *segments* oblong, obtuse, villous on the outside, silky: uppermost rather broader than the others: *inner corolla (label)* of one piece, longer than the outer one, contracted at the base into a tube, adnate to the faux of the outer one, thence dilated and lastly expanded into a large roundish *lamina* or *border*, undulated at the edge, prolonged at the top into 2 oblong lobes (4 lines long), inclined upwards; red on the inside and sprinkled over with dots and little broken yellow lines; yellow on the outside and ornamented with a few red lines. *Filament* 1, in-

serted at the tube of the inner corolla under the upper segment of the outer one, thick, broadish dilated at the top for the reception of the anther, whitish, the length of the corolla. *Anther* very large, adnate, 2-parted lengthways, bifid at the top, whitish. *Germen* inferior, globular, villous. *Style* filiform, slender, the length of the stamen, pressed close to the filament, enclosed at the upper part between the lobes of the anther. *Stigma* capitate, compressed, white. *Capsule* globular, villous, thickish, three-celled (perhaps also 3-valved). *Seeds* more than one, roundish cornered.

NOTE.

The IPOMŒA *bona nox* β. purpurascens of the 290th article of this work, as Mr. Herbert has kindly suggested to us, is evidently the IPOMŒA *muricata*. *Jacq. hort. schœnb.* 3. *t.* 323. A correction which we shall make more fully in the Appendix to the present volume.



GESNERIA aggregata.

New Brazil Gesneria.

DIDYNAMIA *ANGIOSPERMIA.*

Nat. ord. CAMPANULACEÆ. *Jussieu gen.* 163. *Div. I.* Antheræ distinctæ.

GESNEREÆ. *Richard apud Kunth nov. gen. et spec.* 2. 315.

GESNERIA. Cal. germini adnatus; limbo libero, 5-partito. *Cor.* tubulosa, supernè ampliata; limbo bilabiato; labio superiore emarginato-bilobo, inferiore 3-fido. *Stig.* bilobum. *Caps.* calyce vestita, 1-locularis, 2-valvis; placentis parietalibus 2 oppositis, bilamellatis.

Herbæ, suffrutices aut frutices foliis oppositis, ternis aut quaternis, integris. Pedunculi *axillares* 1- *aut multi-flori, aut spicæ terminales.* Corollæ *coccineæ aut virescentes.* Kunth loc. cit.

G. *aggregata*, tota villosa; ramis teretibus; foliis oppositis oblongo-ovatis crenatis; pedunculis 2-4, axillaribus, unifloris, aggregatis; corollis clavato-cylindricis, hinc basi subdidymo-ventricosis.

Herbacea? erecta. Fol. *rugosa, subtùs tomentoso-albicantia;* petiolus *pluriès brevior laminâ.* Pedunculi *filiformes, flexiles, longiores floribus nutantibus.* Cal. *herbaceus, 4-plo brevior corollâ, segmentis stellato-patentibus angulato-ovatis, uno submajore.* Cor. *coccinea, villosa, rectiuscula, subuncialis, diametro ferè pennæ scriptoriæ, posticè ad basin ventre brevi abrupto subdidymo-protuberante:* limbus *subæqualis multotiès brevior tubo, obsoletè bilabiatus, laciniis rotundatis, 2 infimis lateralibus imbricato-conniventibus.* Stam. *æqualia corollæ, rudimentum quinti nullum:* fil. *alba, glabra:* anth. *subquadrato-connexæ, 4-loculares, loculis receptaculo carnoso papilloso insitis:* pollen *ochroleucum.* Germ. *conicum, villosum,, angustum, subbrevius segmentis calycinis:* stylus *filiformis, continuus, villosiusculus, cuniculatus:* stigma *apertum, simplex.* Glandulæ 4 *ad juncturam calycis cum germine insertæ, 3 albæ parvulæ dentiformes æquidistantes, 1 lutea superior major duplicato-dentiformis.*

As far as we have been able to trace, the present species appears to be unrecorded. It has been very lately introduced from the Brazils. Flowers in the summer, and continues by a succession of bloom a long while in beauty. The drawing was taken at the nursery of Messrs. Whitley, Brames, and Milne, at Fulham, where it is cultivated in the hothouse, but not in the tan-pit.

It answers very well to the specific character of the GESNERIA *tubiflora* of Cavanilles; but a reference to the detailed description and the figure of that species, allowing even for their being obtained from a dried plant, proves to us that the two can never be of the same species.

Perennial? herbaceous? upright, villously furred; branches round. *Leaves* opposite, oblongly ovate, crenate, wrinkled, whitely tomentose underneath: *petiole* several times shorter than the blade. *Peduncles* 2-4, axillary, congregated, filiform, flexile, longer than the flowers. *Cal.* 4 times shorter than the corolla; segments angularly ovate, stellately spreading, one rather larger than the rest. *Corolla* scarlet, villous, clavately cylindrical, slightly curved, rather more than an inch long, nearly of the diameter of a smallish pen, shallowly and subdidymously protuberant at the back of the base: *limb* many times shorter than the tube, obsoletely bilabiate, segments equal, rounded, two lower lateral ones approaching each other so as to lap over. *Stamens* equal to the corolla; we perceived no signs of the rudiment of a fifth: *filaments* white, smooth: *anthers* connected nearly in a square, 4-celled, cells seated upon a fleshy papulous receptacle: *pollen* cream-coloured. *Germen* conical, villous, narrow, rather shorter than the segments of the calyx: *style* filiform, continuous, slightly villous, piped: *stigma* open, simple. *Glands* 4, inserted at the junction of the calyx with the germen, 3 white small dentiform equidistant, 1 yellow superior larger doubly dentiform.

Lyd Edwards del.

KŒLREUTERIA paniculata.

Panicled Kœlreuteria.

OCTANDRIA *MONOGYNIA.*

Nat. ord. SAPINDI. *Jussieu gen.* 247. *Append.* 451. *Div. I.* Petala duplicata, seu petalo interiore ad unguem aucta.

KŒLREUTERIA. Cal. 5-phyllus. *Cor.* 4-petala irregularis. *Nect.* squamæ 4, bifidæ. *Caps.* 3-locularis, loculis dispermis. *Willd. sp. pl.* 2. 330.

K. paniculata. *Laxmann nov. comment. petrop.* 16. 561. *t.* 18. *Willd. arb.* 163. *Ejusd. sp. pl.* 2. 330. *Hort. Kew.* 2. 7. *ed.* 2. 2. 351.

Kœlreuteria paullinoides. *L'Herit. sert. angl.* 18; *(tab. licèt undique citata reverà ined.)*

Sapindus chinensis. *Lin. syst. veg. ed.* 13. 315. *Lin. fil. suppl.* 228.

Frutex. Folia *alterna impari-pinnata.* Foliola *petiolata oblongo-ovata laciniato-dentata basi cuneata, apice obtusa utrinque glabra.* Panicula *axillaris angusta.* Willd. sp pl. 2. 330.

Cal. *pentaphyllus: foliola oblonga, obtusa, erecta, glabra, subciliata, sesquilinearia: 2 inferiora remotiora, paulò majora.* Pet. 4 *receptaculo inserta.* Ungues *lineares, erecti, calyce breviores, villosi.* Laminæ *oblongæ, obtusæ, calyce triplo longiores, flavæ; 2 inferiores paulò minores, basi invicèm remotæ.* Nect. *processus duo ad basin singulæ laminæ, plicati, primùm lutei, dein coccinei* Fil. 8, *receptaculo inserta, germen undique cingentia, filiformia, hirta, flavicantia, sub anthesin erecta, calyce vix longiora, tandèm declinata, elongata.* Anth. *ovatæ, cinerascentes.* Germ. *superum, oblongum, trigonum, pubescens.* Stylus *filiformis, petalis paulò brevior.* Stigma *obsoletè trifidum.* Pericarpium *immaturum, oblongum, triquetrum, 3-loculare.* Sem. *in singulo loculamento bina.* Dryander in Sched. Banksianis.

A hardy chinese treelike shrub, said to have been introduced by Lord Coventry about 1763. We were favoured with the present specimen by Lady Aylesford; in whose collection at Stanmore it flowered this summer. It was also in flower at Messrs. Whitley and Co.'s at the Fulham nursery.

The species is said by L'Heritier to be polygamous.

We had no opportunity of describing the plant; but shall subjoin the account we find in Martyn's edition of Miller's Dictionary, and a version of Mr. Dryander's excellent description of the flower taken from the Banksian manuscripts.

" Trunk arboreous, upright, round, smooth, branched,
" exceeding the height of a man. Branches scattered,
" spreading, twisted, when young having dotted glands

" scattered over them. Buds from the axils of the leaves, " very resinous, cone-shaped with imbricate scales. Pe- " tioles scattered, spreading very much, club-shaped at the " base, channelled towards the top, very long. Leaves un- " equally pinnate, with six pairs of leaflets, which are ovate, " laciniate, serrate, acute, smooth, flat. Peduncles ter- " minating, scattered, spreading, branched into many " pedicles. Flowers panicled, three or more on each pe- " dicle."

Calyx five-leafletted: leaflets oblong, obtuse, upright, smooth, subciliate, a line and an half long: 2 lower ones further removed, a little larger. *Petals* 4, inserted into the receptacle. *Unguis* or narrow part, linear, upright, shorter than the calyx, villous. *Lamina* or broad part oblong, obtuse, three times longer than the calyx, deep yellow; two lower ones a little smaller, wide of each other at the base. *Nectary* formed of two plaited processes at the base of each of the laminæ, at first yellow, at last scarlet. *Filaments* 8, inserted into the receptacle, girdling the germen, filiform, roughly furred, yellowish, while the flower is in perfection upright, scarcely longer than the calyx, finally bent downwards and elongated. *Anthers* ovate, of a grey or ash colour. *Germen* superior, oblong, three-cornered, pubescent. *Style* filiform, little shorter than the petals. *Stigma* obsoletely 3-cleft. *Pericarp* (observed when unripe) oblong, 3-sided, 3-celled. *Seeds* two in each cell.

Lond. Edwards ad. del

Lublin & Bridgman's Sons 170 Piccadilly Dec.r 1 1818

Smith sc

HYDROPHYLLUM virginicum.
Virginian Water-leaf.

PENTANDRIA *MONOGYNIA.*

Nat. ord. Boragineæ. *Jussieu gen.* 128. *Div. II.*
Hydrophylleæ. *Brown ined.*

Obs. Distincti (à *Borragineis* nempè) ordinis initia constituunt genera capsularia Hydrophyllum, Phacelia, et Ellisia, ob albumen copiosum cartilagineum, et folia composita v. altè lobata. *Brown prod.* 492.

HYDROPHYLLUM. Suprà vol. 3. *fol.* 242.

H. *virginicum*, glabriusculum; foliis pinnatifidis ovali-lanceolatis inciso-serratis, fasciculis florum conglomeratis. *Pursh amer. sept.* 1. 134.

Hydrophyllum virginicum. *Lin. sp. pl.* 1. 208; (virginianum). *Mill. dict. ed.* 8. *Hort. Kew.* 1. 197. *ed.* 2. 1. 313. *Michaux bor. amer.* 1. 134. *Lamarck illustr. t.* 97. *f.* 1. *Schkuhr handb.* 1. 114. *t.* 35. *Willd. sp. pl.* 1. 814.

Hydrophyllum Morini. *Tourn. inst.* 81. *Mill. dict. ed.* 7.

Hydrophyllum. *Gron. virg. ed.* 2. 26.

Hydrophyllum floribus speciosis albis. *Clayt. n.* 291.

Herba *perennis, scabriùs pubescens, radice fibrosâ.* Fol. *radicalia plura, erecta, pinnatifida, immersè venosa, lobis* 3-7, *horizontalibus, recurvis, oblongo-lanceolatis, supernè serratis, sub3uncialibus, imis* 2 *sæpè bidigitato-incisis, terminali latiori, infernè cuneato, haud rarò* 3-*lobatìm-diviso:* petiolus *erectus, subsemiteres, infernè livido-purpurascens, subsesuncialis* v. *plurimùm longior laminâ.* Caulis *vix* 8-*uncialis, flexuosus, distantèr sub3foliatus, crassitudine substantiâ et colore ferè petiolorum, foliis munitus radicalium conformibus, minoribus tamen, inflorescentiâ remotis.* Pedunculi *subbini, terminales, suprà racemosi, pluriflori,* floribus *secundo-cymosis longioribus* pedicellis *appressè hirsutis.* Cal. *herbaceus,* 5-*partitus, extùs appressè pilosus, segmentis lineari-subulatis, ad basin usque reflexis.* Cor. *albida,* ¼ *unciæ* v. *circitèr profunda, oblongo-campanulata, infra medium usque* 5-*fida; limbi laciniis erectis oblongis obtusis, nervo medio dorsali; tubo sulcis* 5 *internis longitudinalibus melliferis filamentorum intermediis marginatis cum labris conniventibus.* Fil. *subduplo longiora corollâ, æqualia, erecta, filiformia, medio pilosa, basi corollæ inserta:* anth. *oblongæ, fuscæ, incumbentes, polline ochroleuco.* Germ. *pilis albis erectis hirsutum, subrotundum:* stylus *albus, filiformis, strictus:* stig. 3 v. 2, *erecto-patentia brevia teretia fine prunioso.*

Two species of this genus have been introduced into our collections, of which the other has been already published in this work. Both are hardy perennials and natives of North America. The present was cultivated by Miller at the physic garden, Chelsea, in 1739.

Roughishly pubescent: *root* fibrous. *Root-leaves* several, upright, pinnatifid, immersedly veined; lobes 3-7, horizontal, recurved, oblongly lanceolate, serrate at the upper

part, about 3 inches long, two lower ones often dissected bidigitately, terminal one the broadest, cuneate at the lower part, not unfrequently trilobedly divided: *petiole* upright, nearly semicylindrical, lividly purple at the lower part, about six inches high, much longer than the blade. *Stem* scarcely eight inches high, flexuose, remotely subtrifoliate, of nearly the same thickness, colour, and substance as the petioles, furnished with leaves of almost the same form as the root-ones, only smaller, standing wide of the inflorescence. *Peduncles* about two, terminal, racemosely flowered at the upper part; *flowers* several in a cyme pointing one way, longer than the close-pressedly hirsute pedicles. *Calyx* herbaceous, 5-parted, close-pressedly furred on the outside; segments linearly subulate, reflex to the base. *Corolla* whitish, about one fourth of an inch deep, oblongly campanulate, 5-cleft to below the middle; segments of the limb upright oblong obtuse, with a middle dorsal nerve; tube furnished at the inside with five prominently bordered longitudinal honeybearing furrows or channels placed alternately with the stamens. *Filaments* about twice the length of the corolla, equal, upright, filiform, hairy at the middle, inserted at the base of the corolla: *anthers* oblong, brown, incumbent; *pollen* cream-coloured. *Germen* roughly furred with upright hair, roundish: *style* white, filiform, stiff: *stigmas* 3 or 2, uprightly spreading, short, round, with frostedly roughened summits.

The drawing was taken last summer from a plant which had been imported from America by Messrs. Frasers, of the Sloane Square nursery; and formed part of that very extensive collection of rare North American plants.

Lyd. Edwards del. Pub by J. Ridgway & Sons 170 Piccadilly Dec.r 1.1818 Smith sc.

PASSIFLORA incarnata. δ.

North American flesh-coloured Passionflower or May-Apple.

MONADELPHIA *PENTANDRIA.*

Nat. ord. PASSIFLOREÆ. *Jussieu in annales du muséum.* 6. 102.
PASSIFLORA. Suprà vol. 1. *fol.* 13.

Passiflora incarnata. *Vide suprà vol. 2. fol. 152, & in notis tomo eidem appensis.*

The present is the North American plant included by Linnæus in his PASSIFLORA *incarnata*; but if it is to be held a distinct species from that which we have given as the variety β in the 152d article of this work, not the one by which the genus first made its appearance in Europe; although both have been combined under the Linnean *incarnata*. The species which first appeared in Europe, we have little doubt, was that which we have given in the above cited article, and which has since been published in Curtis's Magazine and in the Horticultural Transactions, by the specific title of *edulis*. Some botanists however are of a different opinion, and think the original plant was neither the present species, nor that we speak of, but a different, though closely allied, one.

We have referred to our former article for the synonymy, leaving our readers to apply the various synonyms according to their own judgment.

We have not discovered, on a comparison of the living plants, any differences, beyond colour, of which we were not aware when we published the variety β in the 152d article of this work; except that the lower portion of the calyx in the Brazil plant is contracted into a shallow tube, with a partitioned nectary, while here the same part is nearly flat and the nectary not partitioned.

The drawing was taken this summer from a plant which flowered in the rich and well kept collection of Mr. Vere, at Kensington Gore.

Lewis del. Pubd by J. Ridgway & Sons. 171 Piccadilly. Decr 1. 1818. Smith sc

IPOMŒA platensis.

The Plata Ipomœa.

PENTANDRIA *MONOGYNIA.*

Nat. ord. CONVOLVULI. *Jussieu gen. Div. I.*
CONVOLVULACEÆ. *Brown prod.* 481. *Sect. I.*
IPOMŒA. Suprà vol. 1. *fol.* 9.

I. *platensis*, ramis pedunculis petiolisque tuberculatis; foliis palmatis, lobis septenis cuneato-oblongis, obtusulis cum brevi acumine, extimis minoribus, pedunculis pauci-plurifloris supernè cymosis parùm longioribus petiolo, calyce foliolisque suborbiculatis.

Perennis, sempervirens, radice *tuberosâ.* Folia *glabra; lobi infra* 3 *uncias longi, medius major infra unciam latus.* Pedunculi *solitarii,* 1-5-*flori vel ultrà, erecti, graciliores petiolo, breviores folio;* pedicelli *breves, supernè cymoso-sparsi, singuli* bracteâ *parvâ acuminatâ subtensi.* Cor. *albo-purpurascens, substrato albo lineis tenuissimis purpureis densè striato;* tubus *pennâ scriptoriâ duplo crassior, intùs suturatè purpureus;* limbus *diametro* 2 *unciarum cum dimidio alterius, explanatus, corrugulatus, erosus, ad plicarum terminationes exciso-emarginatus.* Anth. *una exsuperans stigma: Vix nota constans?*

We are indebted to the valuable collection at Spofforth for the sample of this fine species, which we cannot trace to any on record. Mr. Herbert, from whom we received it, informs us that it was raised from seed collected by Mr. Cooper on the banks of the Plata, where it is found in great plenty. The specific name has been adopted at Mr. Herbert's suggestion; and to that gentleman we are obliged for what we have to say of the plant; the sample not having been preserved for description after the drawing had been made.

Cultivated in the hothouse. Flowers in August. The foliage has a near affinity to that of IPOMŒA *digitata;* but a reference to the figure in Plumier shows the flower to be there of a very different nature from the one in our plant.

An evergreen perennial plant with a tuberous root. *Branches, peduncles,* and *petioles* tuberculated. *Leaves* palmate; *lobes* 7, cuneately oblong obtuse and shortly tapered at the end, middle one the largest, under 3 inches long, and less than one inch broad. *Peduncles* several-

flowered, ending in a short scattered cyme at the top, rather longer than the petiole, shorter than the leaf: *pedicles* short, with a small pointed bracte under each. *Calyx* short, suborbicular, as are its *leaflets*. *Corolla* very pale purple, its white ground being thickly streaked with fine purple lines; *tube* nearly twice the diameter of a common pen; *limb* flatly expanded, minutely wrinkled or rather rumpled, eroded at the edge, deeply indented at the terminations of the plaits. In our sample one anther overtopped the stigma; but probably this is not a constant character.

NOTE.

In first page of the 323d article of this work at the fifth line from the bottom; for "MELASTOMA *sericea*, read, MELASTOMA *holosericea*."

Pubd. by Robinson & Son, 170 Piccadilly, Dec.r 1818.

INULA glandulosa.

Glandular-leaved Inula.

SYNGENESIA *POLYGAMIA SUPERFLUA.*

Nat. ord. CORYMBIFERÆ. *Jussieu gen.* 177. *Div. II.* Receptaculum nudum. Semen papposum. Flores radiati. In TUSSILAGINE et SENECIONE flores partìm flosculosi.

INULA. Flores radiati ligulis numerosis. *Cal.* imbricatus squamis patulis, exterioribus majoribus. *Anth.* basi bisetæ. *Pappus* pilosus. *Flores lutei axillares aut terminales, sæpè corymbosi.* Juss. loc. cit. 181.

I. *glandulosa*, foliis sessilibus oblongis obsoletè serratis serraturis glandulosis, caule hirsuto unifloro, calycinis squamis lanceolatis villosis. *Willd. sp. pl.* 3. 2097.

Inula glandulosa. *Marsch. Bieb. taur. cauc.* 2. 319. *Adam apud Weber et Mohr cat.* 1. 68. *n.* 40. *Willd. enum.* 896. *Hort. Kew. ed.* 2. 5. 78. *Curtis's magaz.* 1907.

Inula orientalis. *Lamarck encyc.* 3. 255.

Herbacea, perennis. Caulis *ascendens, hirsutus, subteres, striatus.* Fol. *distantia, decrescentia, sparsa, erectiuscula, semiamplexicaulia, margine glandulis nigricantibus obsoletè dentata; inferiora lanceolato-oblonga, superiora ovato-lanceolata, subtùs varicoso-venosa, longiora 3-uncialia vel ultrà, latitudine circitèr unciali.* Cal. *multiplex, mollis, fusco-hirsutissimus, squarrosè v. sine ordine patens, duplo v. ultrà brevior radio, foliolis exterioribus lineari-lanceolatis angustis, interioribus angustissimis.* Flosculi radii *numerosi, lineares, angusti, flavicantes, ultra unciam longi, apice tridentati, dorso pilosi.* Flosculi disci *limbo turbinato-patente, laciniis acutis erectiusculis.* Anth. *flavæ.*

According to Count Mussin Puskin, a native of that part of Georgia which is near the Caspian Sea. Mr. Marschall of Bieberstein found it on Mount Caucasus, growing along with the *grandiflora* of the same genus, from which, he observes, it differs only by having the glands of the leaves produced on a completely entire border, instead of at the points of the teeth of a serrated border; and adds, that it seems to be a mere variety of it, though, as well as Willdenow, he records the two as specifically distinct in his work. We do not see why this useful botanist has quoted Lamarck's INULA *orientalis*, professedly adopted by that author from Tournefort, as a synonym to his *glandulosa*, while he adds the plant from Tournefort's own work as a synonym to his *grandiflora*. This seems an oversight.

Introduced in 1804 by Mr. Donn, the then Curator of

the Cambridge Botanic Garden. Flowers in July and August.

A hardy perennial plant. *Stem* upright, shaggily furred, nearly round, nervedly streaked. *Leaves* wideset, decrescent, scattered, pointing rather upwards, halfstemclasping, owing to the blackish glands at the edge showing the appearance of being obsoletely serrate, lower ones lanceolately oblong, upper ones ovately lanceolate, varicosely veined underneath, longer ones three inches or more in length, and an inch or more in breadth. *Calyx* of numerous leaflets, soft, with a dark coloured and very shaggy fur, squarrosely or irregularly spreading, twice shorter than the ray or more, outer *leaflets* linearly lanceolate, narrow, inner ones very narrow. *Florets of the ray* numerous, linear, narrow, deep yellow, more than an inch long, three-toothed, hairy at the back. *Florets of the disk* with a turbinately spreading limb, segments rather pointed and nearly upright.

Edwards del.

Pub.d by J. Ridgway & Sons. 170 Piccadilly. 1.st December 1818.

Scott sc.

IPOMŒA setosa.

Bristly Ipomœa.

PENTANDRIA *MONOGYNIA.*

Nat. ord. CONVOLVULI. *Jussieu gen. Div. I.*
CONVOLVULACEÆ. *Brown prod.* 481. *Sect. I.*
IPOMŒA. Suprà vol. 1. *fol.* 9.

I. *setosa*, ramis petiolis pedunculis calycibusque setoso-hirsutis; foliis nudis, cordato-trilobis, lobis dentato-sinuatis, pedunculis robustis longioribus petiolo: multifloris, trichotomo-cymosis, *(sæpè)* calyce oblongo, foliolis oblongis.

Annua? Caulis *infernè sublignescens.* Pubescentia *è setis purpurascentibus patentibus glandulâ insidentibus.* Rami pedunculique *teretes*, pedicelli *cum calyce subclavato-continui, crassi.* Cal. *oblongus*, foliolis *oblongis, brevitèr acuminatis, subæqualibus.* Cor. *hypocrateriformis purpureorubens:* tubus *cylindraceus, nec ventricosus, multotiès longior calyce:* limbus 2 *uncias circà cum dimidio transversus;* laciniæ *breves, in puncto unoquoque plicarum intermedio emarginatæ; plicæ in breve acumen desinentes.* Fol. 3-4-*uncialia, lobis angulato-attenuatis;* petiolo *plurimùm breviore laminâ nervosâ.*

We had no opportunity of inspecting the specimen from which the drawing was made while in a state fit for description; and are indebted for what we have to say of it to Mr. Herbert, by whom this rare and very curious plant was raised, as we are informed, from Brazil seed. It flowered in the hothouse at Spofforth, the first year after sowing, and is suspected to be only annual, notwithstanding the woody consistence of the lower part of the stem.

The species comes very close to *platanifolia* of the same genus, and also to *Batatas* (both placed under CONVOLVULUS by Willdenow), the latter of which appears never to have flowered in this country, and the former never to have been introduced. As far, however, as we can judge from the descriptions and the mutilated specimens in the Banksian Herbarium, we think our plant may be at once distinguished from both by the very remarkable pubescence, as well as by the extension of the same over the calyx, which does not appear to take place in the others.

We were not informed if the root was tuberous, as in

platanifolia and *Batatas*, or not, though from analogy we suspect it to be so.

Branches, petioles, peduncles, and calyx roughly furred with a bristly spreading purple pubescence, each hair of which stands on a small glandular base or tubercle; branches and peduncles round: *peduncles* upright longer than the petioles, robust, from two- to eight- flowered in the present plant, generally trichotomously divided; *pedicles* continuous with the calyx and subclavately thickened. *Calyx* oblong; *leaflets* oblong, nearly equal, rather pointed. *Corolla* purplish red: *tube* cylindrical, not ventricose, many times longer than the calyx: *limb* about two inches and a half over; *segments* shallow, notched in the middle of the intervals between the plaits; plaits shortly pointed. *Leaves* about 3 or 4 inches long, naked, cordately 3-lobed, lobes dentately sinuated at the outer edge, angularly tapered: *petiole* several times shorter than the nerved blade.

Flowers in August. We have not been informed of the height the plant attained at Spofforth.

Drawn & del.

Lith by J. Ridgway & Sons 170 Piccadilly Jan. 1 1819

CACTUS repandus.

Wavy-angled Torch-thistle.

ICOSANDRIA *MONOGYNIA.*

Nat. ord. CACTI. *Jussieu gen.* 310. *Div. II.* Petala et Stamina indefinita.

CACTUS. Suprà vol. 2. *fol.* 137.

Div. Cerei *erecti, stantes per se.*

C. *repandus,* erectus, longus, octangularis: angulis compressis undatis: spinis lanâ longioribus. *Lin. sp. pl. ed.* 2. 1. 667.

Cactus repandus. *Willd. sp. pl.* 2. 940. *Hort. Kew.* 2. 151. *ed.* 2. 3. 277.

Cactus erectus cylindricus sulcatus tenuior summitate attenuatus, aculeis confertis. *Browne jam.* 238.

Cereus gracilis. *Mill. dict.* 8. *n.* 8; *(rectiùs quàm* Cereus repandus *ejusdem loci n.* 5. *in Hort. Kew. citatus).*

Cereus altissimus gracilior, fructû extùs luteo, intùs niveo seminibus nigris pleno. *Sloane jam.* 2. 158. *Trew ehret. t.* 14.

Native of Jamaica and other parts of the West Indies, where it grows in the woods, to the height of fifteen or twenty feet. Sloane tells us that the fruit ripens in October, and is eaten. By some this is described as having the flavour of a strawberry. The dry stem of the plant is used by the natives for a torch to catch fish by, in the night-time. They hold it at the ends of their boats, lighted, and the fish leaping at it, they strike them with spears for the purpose.

The plant rarely blossoms in this country. The present drawing was taken from one that flowered and ripened its fruit, at the nursery of Messrs. Whitley, Brames, and Milne, Fulham.

Introduced by Mr. Philip Miller, in 1728. It is far from being so well known in our collections as the Great Night-flowering Cereus (CACTUS *grandiflorus),* nor indeed is it so deserving of the attention of the gardener, the flower being far less ornamental, and the fruit not worth being procured at the expense of a hothouse.

Pl. Edwards. del. Pub. by T. Ridgway & Sons. 170 Piccadilly. Jan. 21. 1819. Smith. Sc

HIBISCUS Rosa malabarica.

The Malabar Rose Hibiscus.

MONADELPHIA *POLYANDRIA.*

Nat. ord. MALVACEÆ. *Jussieu gen.* 271. *Div. III.* Stamina indefinita. Fructus simplex multilocularis.
HIBISCUS. Suprà vol. 1. *fol.* 29.

H. *Rosa malabarica*, foliis cordatis, acutè serratis; ramis subhirtis; caule fruticoso. *Kœnig in specimine archetypo herb. banks. asservato.*
Hibiscus phœniceus. *Roxburgh MSS. in sched. banks. cum tab.; (non aliorum.)*
Suryamani (or gem of the sun). *Sanscrit.*
Sjamin. *Rheede mal.* 10. 1. *tab.* 1.
(β) Hibiscus hirtus. *Lin. sp. pl. ed.* 2. 2. 977. *Cav. diss.* 3. 156. *t.* 67.
Hibiscus phœniceus; *β. hirtus. (Exclusâ varietate α, suprà in vol.* 3. *fol.* 230. *datâ.)*
Alcea fruticosa malabariensis, angustis foliis rigidiusculis, floribus amœnè rubellis, semine papposo. *Pluk. alm.* 14. *t.* 254. *fig.* 3.

Frutex (hirtiusculus) foliis *cordatis, serratis, acutis, villosis;* stipulis *subulatis;* pedunculis *axillaribus, solitariis, unifloris (non articulatis nob.);* foliolis *calycinis exterioribus* 5-6; antheris *verticillatis;* capsulis *globosis;* seminibus *lanatis. Variat flore albo.* Roxb. loc. cit.

Clearly a very distinct species from the HIBISCUS *phœniceus* of the younger Linnæus and Jacquin, published in the third volume of this work, fol. 230; although probably a mere variety of the HIBISCUS *hirtus* of the elder Linnæus, incautiously subjoined by Willdenow to *phœniceus* as the variety β. In *phœniceus* the peduncles are jointed, and the upper part is thicker than the lower; which is not the case here. The leaflets of the inner calyx are there membranous, rather smooth, and three times broader than in our plant, where they are herbaceous and roughly furred. *Phœniceus* is altogether a much slenderer plant, not so conspicuously nor stiffly furred as the present; and we suspect that it is not even an East-Indian vegetable. Jacquin's specimen is preserved in the Banksian Herbarium, and is evidently of a distinct species from the three other specimens from three distant parts of India preserved in the same place under one name; and which appear all to be of the species of our plant. Probably Jacquin's plant is really South-American, as he asserts.

The drawing was made from a sample which flowered late in the summer at Messrs. Whitley, Brames, and Milne's, Fulham; where it had been raised from seed, sent from Calcutta by Mrs. Clarke. According to Van Rheede it grows to be a pretty large shrub. Kœnig speaks of its being very generally cultivated in the gardens of the temples of India. Dr. Roxburgh says it is common in all parts of that country.

Linnæus has not adduced Van Rheede's figure to his *hirtus*; and it being possible that his plant may be specifically distinct from the present, we have deemed it safer to abide by Kœnig's specific name; his plant being clearly the species and variety of Van Rheede and Roxburgh, as well as of the present article.

We do not know that the species has been before introduced into this country.

Cultivated in the hothouse. The colour of the flower is extremely brilliant.

Smith Sc.

Published by Longman & Sons, 178 Piccadilly, Jan.ry 1.1829.

TABERNÆMONTANA amygdalifolia.

Almond-leaved Tabernæmontana.

PENTANDRIA *MONOGYNIA.*

Nat. ord. APOCINEÆ. *Cal.* 5-divisus, persistens. *Cor.* 1-petala, hypogyna, regularis, 5-loba, æstivatione imbricatâ, decidua. *Stam.* epipetala, lacinîis limbi alterna. *Fil.* distincta. *Anth.* 2-loculares, longitudinalitèr dehiscentes. *Pollen* granulosum, stigmati immediatè applicitum. *Germina* 2, v. 1, biloculare, in plurimis polyspermum. *Styli* 2, v. 1. *Stigma* 1. *Fructus* follicularis, capsularis, drupaceus, v. baccatus, duplex v. simplex. *Semina* sæpissimè albuminosa. *Embryo* foliaceus. *Plumula* inconspicua. *Arbores v. frutices sæpè lactescentes. Folia opposita, nunc verticillata, rarò sparsa, integerrima ciliis glandulisve interpetiolaribus sæpiùs instructa.* Brown prod. 1. 465.

Div. II. Semina non comosa. Fructus bifollicularis.

TABERNÆMONTANA. Cor. hypocrateriformis, limbo 5-partito. *Stamina* inclusa: *Antheris* sagittatis. *Germina* 2. *Stylus* filiformis. *Stigma* è dilatatâ base bifidum. *Folliculi* 2. *Semina* pulpâ immersa. *Arbusculæ. Folia opposita. Stipulæ interpetiolares, infrà adnatæ, apice solutæ. Cymæ subdichotomæ. Calyx persistens.* Brown loc. cit. 467.

T. *amygdalifolia*, foliis oppositis ovali-lanceolatis, staminibus tubum corollæ superantibus. *Willd. sp. pl.* 1. 1245.

Tabernæmontana amygdalifolia. *Jacq. amer.* 39. *tab.* 181. *fig.* 15.

Cestrum nervosum. *Mill. dict.* 8. *n.* 3; *(affirmante specimine archetypo in Herb. Banks. asservato.)*

Cestrum foliis lanceolatis oppositis nervis transversalibus pedunculis ramosis. *Mill. dict. ed.* 7. *n.* 3.

The CESTRUM *nervosum* of the eighth edition of Miller's Gardener's Dictionary, appears never to have been taken up either as a synonym or separate species, in any other enumeration of plants; and seems to have been entirely overlooked in all subsequent botanical works. We know however that it is of the present species, and that it has flowered with us, by Miller's own specimen, gathered in the Chelsea Garden, and now preserved in the Banksian Herbarium. It does not appear in either edition of the Hortus Kewensis even by the present title, though it has been cultivated in our collections for more than half a century. What plants there are of it in this country, we suspect, are scions of the one originally received by Miller from Carthagena in South America, where Jacquin's plant was also found. The drawing was taken at Messrs. Whitley, Brames, and Milne, of the Fulham nursery, where it is cultivated in the bothouse.

The following is the description of the plant, as given in the Gardener's Dictionary. "It rises with a shrubby stalk

" five or six feet high, covered with a brown bark, and
" divides upwards into many small branches, which are
" garnished with spearshaped leaves, about four inches long
" and a little more than one broad; these are smooth, of a
" light green, and have many horizontal veins, running
" from the midrib to the sides, and are placed opposite by
" pairs. From the wings of the leaves, towards the upper
" part of the branches, are produced the flowers, standing
" upon branching footstalks, each sustaining four or five
" flowers, whose tubes are swelling at the base, just above
" the cup, but contract upwards to the mouth, where the
" petal is cut into five broad segments which spread flat;
" they are white."

This species differs in regard to one of the features enumerated in the present generic character, by having stamens which stand above the mouth of the tube of the corolla. It may not be useless to subjoin a version of the character by which Mr. Brown has circumscribed the natural order he has detached, under the title of APOCINEÆ, from that of his ASCLEPIADEÆ; which orders previously formed the APOCINEÆ of Jussieu.

Calyx five-cleft, persistent. *Corolla* monopetalous, inferior, regular, 3-lobed, (before expansion) imbricate, deciduous. *Stamens* placed upon the corolla, alternate with the segments of the limb. *Filaments* distinct. *Anthers* bilocular, bursting longitudinally. *Pollen* granular, applied immediately to the stigma (not by the intervention of a particular process, as in the ASCLEPIADEÆ). *Germens* 2, or 1 and bilocular, in most manyseeded. *Styles* 2 or 1. *Stigma* 1. *Fruit* follicular, capsular, drupaceous, or berried, double or single. *Seeds* generally furnished with an *albumen*. *Embryo* foliaceous. *Plumule* inconspicuous. *Trees* or *shrubs*, often milky. *Leaves* opposite, sometimes verticillate (whorled), seldom scattered, quite entire, generally furnished with either *ciliæ* or glands between the petioles. *Inflorescence* subcorymbose.

We learn from the same accurate observer of natural affinities, that this subdivision forms a truly natural group, with perhaps the exception of one or two genera; but which if even these were excluded is hardly to be technically defined: though easily distinguished by the economy of the anthers and the stigma from the ASCLEPIADEÆ, which are besides more uniform in the structure of the flower and fruit. The order is also allied to the GENTIANEÆ and RUBIACEÆ.

PAVONIA spinifex.

Prickly-seeded Pavonia.

MONADELPHIA *POLYANDRIA.*

Nat. ord. MALVACEÆ. *Jussieu gen.* 271. *Div. II.* Stamina in tubum corolliferum connata, indefinita. Fructus multicapsularis; capsulæ verticillatæ, in orbem dispositæ aut in unam compactæ.

PAVONIA. Cal. 5-fidus, calyculo 5-20-phyllo aut multipartito cinctus. *Antheræ* in apice et superficie tubi. *Stigmata* 8-10. *Capsulæ* 5 in orbem dispositæ, 2-valves 1-spermæ. *Frutices, rariùs herbæ; flores axillares aut spicati terminales.* HIBISCO *affinis, sed multicapsularis. Capsulæ quarundam apice spinosæ.* Juss. l. c. 272.

P. *spinifex*, foliis ovatis acuminatis subcordatis duplicato-dentatis, pedunculis axillaribus, calyce heptaphyllo, capsulis quadriaristatis, aristis divergentibus. *Willd. sp. pl.* 3. 834.

Pavonia spinifex. *Cavan. diss.* 3. 133. *t.* 45. *fig.* 2. *Hort. Kew. ed.* 2. 4. 232.

Hibiscus spinifex. *Lin. sp. pl. ed.* 2. 2. 978. *Jacq. hort. vindob.* 2. 46. *t.* 103. *Hort. Kew.* 2. 455.

Abutilon americanum fruticosum folio subrotundo flore luteo, fructu aculeato majore. *Plum. spec.* 2. *ic.* 1.

(β) Pavonia *aristata*, caule fruticoso humili, foliis cordatis ovato-lanceolatis crenatis scabriusculis floribus solitariis parvis, capsulis aristatis. *Cavan. diss.* 3. 133. *tab.* 45. *fig.* 3.

Frutex 2-3-*orgyalis*; trunco *pollicem crasso*; ramis *paucis longis, virgatis, teretibus, erectis, junioribus scabriusculis.* Fol. *cordato-ovata, crenata, indivisa vel obsoletè angulata, haud admodùm acuta, utrinque scabriuscula, petiolata, alterna.* Pedunculi *uniflori, solitarii, axillares, petiolorum circitèr longitudine.* Cal. *è duplici serie foliolorum linearium vel lanceolatorum, et ad oras pilosorum*; exterior *quinis, quem etiam nunc pluribus variantem observo*; interior *semi-quinque-fidus est.* Cor. *magna, lutea, elegans, inodora, et subcampanulata, ex* petalis 5 *obversè ovatis dorsoque nervosis.* Antheræ *aurantiacæ.* Germ. *pilosum.* Fructus *è* capsulis 5, *unilocularibus, monospermis, non dehiscentibus, maturis sibi invicèm discedentibus. Hæ singulæ spinis armantur ternis.* Spinæ *laterales, quarumlibet duarum vicinarum capsularum adeò, se invicèm contingunt, ut sæpè unicam mentiantur.* Sem. *oblonga, nigricantia.* Jacq. loc. cit.

PAVONIA is principally distinguished from HIBISCUS by having a fruit separated into 5 distinct bivalved oneseeded capsules, instead of one united into a single five-celled polyspermous capsule, as in the latter.

The present shrub is native of South America; and was introduced from the West Indies by Dr. William Wright in 1778. It is said to vary from with a very large corolla to

with one smaller than the calyx. Willdenow tells us that he has seen *spinifex* produced from the seed of the *aristata* of Cavanilles, and has consequently combined the two into one species. Our drawing was taken from a specimen produced in the hothouse at Boyton, the seat of Mr. Lambert, by whom it was kindly remitted to us in August last.

A weak-growing shrub, sometimes attaining the height of 20 feet, but with a stem seldom thicker than a man's thumb; *branches* few, virgate, long, round, upright, younger ones with a hardish pubescence. *Leaves* cordately ovate, crenated, undivided or sometimes obsoletely angular, not having a very sharp point, roughishly furred on both sides, petiolate, alternate. *Peduncles* oneflowered, solitary, axillary, about the length of the petioles. *Leaflets* of the *outer calyx* linear, five or more, hairy at the edge; *inner calyx* five-cleft, segments lanceolate. *Corolla* large, yellow, scentless, subcampanulately rotate, of obversely ovate petals nerved along the outside. *Anthers* orange-coloured. *Germen* furred. *Capsules* furnished with three spines. The two lateral spines of the two nearest are sometimes so closely placed together that they have the appearance of one.

Mr. Lambert assures us that the seed from which his plant was raised, had been collected in South America 30 years before, by the celebrated Spanish botanists, Messrs. Ruiz and Pavon, from whom he received it.

A Edwards del. Pub.by J. Ridgway & Son. 170 Piccadilly, Jan.y 1. 1819. Smith. Sc

ASTER Amellus.

Italian Star-wort.

SYNGENESIA *POLYGAMIA SUPERFLUA.*

Nat. ord. CORYMBIFERÆ. *Jussieu gen.* 177. *Div. II.* Receptaculum nudum. Semen papposum. Flores radiati; *(in* Tussilagine *et* Senecione *flores partìm flosculosi.)*

ASTER. Suprà vol. 3. *fol.* 183.

Div. Herbacei, foliis linearibus lanceolatisve integerrimis.

A. *Amellus*, foliis oblongo-lanceolatis integerrimis scabris, ramis corymbosis, calycibus imbricatis subsquarrosis, foliolis obtusis, interioribus membranaceis apice coloratis. *Hort. Kew.* 3. 199.

Aster Amellus. *Lin. sp. pl. ed.* 2. 2. 1226. *Mill. dict. ed.* 8. *n.* 2. *Jacq. austr.* 5. 12. *t.* 25. *Willd. sp. pl.* 3. 2031. *Hort. Kew. ed.* 2. 5. 54. *Marsch. bieb. flor. taur. cauc.* 2. 311.

Aster caule folioso, foliis scabris, ciliatis, lanceolatis, obtusis, calycinis squamis ovatis, ciliatis. *Hall. helv. n.* 83.

Aster atticus cæruleus vulgaris. *Bauh. pin.* 267.

Aster atticus. *Dod. pempt.* 266.

Aster VIII., Italorum Fuchsii. *Clus. hist.* 2. 16.

Amellus virgilii. *Calceol. veron.* 456.

(α) foliis obovato-lanceolatis planis, corollis radii numerosissimis subimbricatis.

(β) foliis lanceolatis rugosiusculis subundulatis, corollis radii divaricatis.

Radix perennis, fusca, multiceps, fibrisque numerosis jubata, caules *gignit annuatìm plures, erectos vel basi ascendentes, à dimidio pede ad duos pedes altos, scabros, villosos, teretes, substriatos, plerùmque supra medium modò etiàm totos ramosos.* Folia *ponuntur alternatìm, lanceolato-oblonga, scabra, ad oras villosula, integra, obtusiuscula, caulina infima et radicalia petiolata, reliqua sessilia.* Calycis *virentis* squamæ *sunt oblongæ, ad oras villosulæ;* interiores *erectæ et ad apicem purpureæ.* Corollulæ radii *cum lævi purpurâ cærulescunt:* discus *est luteus. Seminum* pappus *est pilosus et sessilis.* Jacq. loc. cit.

A hardy perennial plant; native of various parts of the South of Europe. Flowers with us from August to September. Cultivated in 1596 by Mr. John Gerarde.

Stems several, upright or ascendently slanted at the base, from half a foot to two feet high, rough, villous, round, somewhat fluted, generally branching above the middle, and sometimes for the whole length. *Leaves* obovately lanceolate, flat, rough, slightly villous at the edge, entire, the lowermost stem-ones and all the root-ones petioled, the others sessile. *Calyx* green, *leaflets* oblong,

slightly villous at the edge, *inner* upright and purple at the end. *Florets* of the *ray* violet-coloured or purplish blue: of the *disk* yellow. *Pappus* or *seed-crown* simple-haired, sessile.

The plant has been fancied by some among the elder herbalists to be the flower meant by the *Amellus* or *Amello* of Virgil :

Est etiam flos in prátis, cui nomen Amello.

Geo Edwards del

Pub by J. Ridgway 168 Bond 170 Piccadilly Jan 1. 1819

Smith sc

PHASEOLUS Caracalla.

Twisted-flowered Kidney-bean, or Snail-flower.

DIADELPHIA *DECANDRIA.*

Nat. ord. LEGUMINOSÆ. *Jussieu gen.* 345. *Div. V.* Corolla irregularis papilionacea. Legumen uniloculare bivalve. *Frutices aut herbæ; folia simplicia aut ternata aut rariùs digitata; stipulæ nunc subnullæ, nunc conspicuæ imo petiolo adnatæ aut ab eodem distinctæ.*

PHASEOLUS. Cal. 2-labiatus, suprà emarginatus, infrà tridentatus, sæpè basi bibracteatus. *Vexillum* reflexum; *carina* cum *staminibus* et *stylo* in spiram convoluta. *Legumen* oblongum, polyspermum, formâ varium; *sem.* reniformia aut subrotunda, hylo laterali. *Herbæ, pleræque volubiles; folia ternata petiolata, stipulis à petiolo distinctis, foliola suprà eundem articulata petiolulo terminali infrà biaristato; lateralibus uniaristatis, aristis stipulæformibus: flores sæpè spicati axillares; legumen sæpè glabrum, rariùs villosum aut et pruriens. Embryo cotyledonibus distinctus.* Juss. loc. cit. 356.

Div. Scandentes.

P. *Caracalla*, caule volubili, vexillis carinâque spiralitèr convolutis. *Lin. sp. pl. ed.* 2. 2. 1017.

Phaseolus Caracalla. *Mill. dict. ed.* 8. *n.* 2. *Andrews's reposit.* 341. *Hort. Kew.* 3. 30. *ed.* 2. 4. 290. *Brotero flor. lusit.* 2. 129.

Phaseolus indicus, cochleato flore. *Triumf. obs.* 93. *t.* 94.

Cochliasanthus; *(in textu);* Caracalla; *(in icone). Trew pl. rar.* 14. *t.* 10.

Cal. *bilabiatus, labio superiore emarginato, inferiore tridentato.* Vexillum *cordatum, obtusum, emarginatum, reclinatum lateribus reflexis:* alæ *ovatæ, longitudine vexilli, unguibus longis insidentes:* carina *angusta spiralitèr contrà solem convoluta.* Fil. *diadelpha (simplex et 9-fidum), intra carinam spiralia.* Germen *oblongum, compressum, villosum.* Stylus *filiformis, spiralitèr inflexus, supernè pubescens:* stigma *obtusum, crassiusculum, villosum.* Legum. *longum, rectum, coriaceum, obtusum cum acumine:* sem. *reniformia, oblonga, compressa.* Trew loc. cit.

Native of India. Cultivated in the garden at Hampton Court, as long ago as 1690.

We are obliged to Mr. Herbert for the sample for our drawing. It was part of a plant which flowered last autumn in the hothouse at Spofforth. We believe the species is not now often found in our collections.

Miller tells us that it is much cultivated in Portugal on account of the fragrance and beauty of the flowers; that it thrives there in the open air, and serves for bowers and trellis-work. We suspect, however, that this excellent horticulturist is not to be relied on in point of orthography,

when he tells us, that the plant is called *Caracalla*, in that country; but that the right name is the one we find in Brotero, viz. *Caracoleiro* (*i. e.* snail-plant); from *Caracòl*, the portuguese word for Snail.

Brotero speaks of it as a subarborescent shrub; with us it has been looked upon as a perennial herbaceous plant. *Stem* twining, from 12 to 20 feet high. *Leaves* very like those of the Common Kidney Bean, only smaller. *Calyx* bilabiate, upper lip emarginate, lower tridentate. *Vexillum* (standard) cordate, obtuse, emarginate, reclined, with deflex sides: *alæ* (wings) ovate, the length of the vexillum, with long ungues: *carina* (keel) narrow, twisted spirally. *Filaments* truly diadelphous, twisted spirally within the carina. *Germen* oblong, compressed, villous. *Style* filiform, spirally twisted, pubescent at the upper part: *stigma* obtuse, thickish, villous. *Pod* long, straight, coriaceous, obtuse with a point: *seeds* reniform, oblong, compressed.

The seed is seldom produced in England.

The twisted carina is a principal feature in the generic character of PHASEOLUS. In the present species the vexillum is likewise twisted.

Engd Pubd 1 Jan 1819 by J Bridgeway & Co 171 Piccadilly London

IPOMŒA Jalapa. α.

Jalap Ipomœa.

PENTANDRIA *MONOGYNIA.*

Nat. ord. CONVOLVULI. *Jussieu gen.* 132. *Div. I.* Stylus unicus. CONVOLVULACEÆ. *Brown prod.* 481. *Sect. I.* Germen unicum.

J. *Jalapa*; pubescens; foliis cordatis integris lobatisque plicato rugosis subtùs subtomentosis, pedunculis 1-3-floris, foliolis calycis ovalibus muticis, corollis campanulatis, seminibus prolixè lanuginosis, radice crassissimo. *Pursh amer. sept.* 1. 146.

Ipomœa macrorhiza. *Michaux bor.-amer.* 1. 141.

Convolvulus Jalapa. *Lin. Mant.* 42. *Hort. Kew.* 1. 211. *ed.* 2. 1. 331. *Willd. sp. pl.* 1. 860. *Desfont. in annales du muséum d'hist. nat.* 2. 126. *tabb.* 40. 41.

(α) corollæ limbo albo. *Hujus loci.*

(β) corollæ limbo roseo. *Curtis's magaz. tab.* 1572.

Radix *tuberosa, magna, perennis.* Caules *herbaceæ, orgyales, volubiles, ramosi, striati.* Folia *pubescentia, cordata, subtùs tomentosa, integra vel 2-7-lobata, nervosa:* petiolus *vix duplo brevior laminâ.* Pedunculi *axillares, solitarii, pubescentes, breviores folio, subtriflori;* pedicelli *glandulis 2 oppositis bracteolisque 2 ovalibus caducis basi muniti.* Cal. *pallido-virens, villosus, oblongo-ovalis, ⅔ unciæ circitèr longus, segmentis ovalibus, obtusis, subæqualibus, arctiùs conniventibus.* Cor. *extùs pubescens, hypocrateriformis;* tubus *subbiuncialis, cylindricus, supernè parùm ampliatus, duplo ferè profundior* limbo *(in præsenti specimine) corrugato.* Stamina *et* Stylus *inclusa:* stig. *subbilobo-capitatum, depressum:* filam. *purpureo-villosa.* Semina *sericeo-pubescentia.*

It seems to be admitted that the plant with a rose-coloured corolla from Mexico, and the present, with the limb of the corolla quite white, from South Carolina and Georgia, are merely varieties of the same species; that which affords the true Jalap.

We are obliged to Mr. Herbert for the specimen we have figured, as well as for an admirable drawing, made by himself, of the flower. The plant was raised in the hothouse at Spofforth, from seeds received from South Carolina about four years ago; but never flowered in perfection till September of the present year.

The leaves in the present plant varied much, but were nearly all divided into a greater or less number of lobes, there being only here and there a few entire ones. Its

flowers, Mr. Herbert informs us, expanded about 9 o'clock at night, and continued in beauty about twenty-four hours. When the corolla is fresh, the limb is of a pure white, but assumes a purplish hue at the plaits when dried.

We are not aware that this variety has been introduced till now.

Root tuberous, large, oblong, perennial. *Stems* herbaceous, six or seven feet high, twining, branched, streaked. *Leaves* pubescent, cordate, tomentose underneath, entire or from two to seven-lobed, nerved: *petiole* twice shorter than the blade. *Peduncles* axillary, solitary, pubescent, shorter than the leaf, about threeflowered; *pedicles* furnished with two opposite glands and two very small oval caducous bractes at the base. *Calyx* palish green, villous, oblongly oval, about two thirds of an inch long; *segments* oval, obtuse, nearly equal, converging closely round the lower part of the tube of the corolla. *Corolla* finely pubescent at the outside, hypocrateriform; *tube* nearly two inches long, cylindrical, but little enlarged at the upper part, nearly twice longer than the *limb*, which in the present specimen was wrinkled, much in the way of the petals of some of the CISTI. *Stamens* and *style* not protruding beyond the tube: *stigma* capitate, slightly bilobed: *filaments* slightly furred with purple villi. *Seeds* covered with a silky fur.

We are obliged to Mr. Herbert and to the description by Mons. Desfontaines, for what we have said of the plant.

Pub. by J. Ridgway & Sons 170 Piccadilly Feb. 1 1819

GESNERIA bulbosa.

Bulbous Gesneria.

DIDYNAMIA *ANGIOSPERMIA.*

Nat. ord. CAMPANULACEÆ. *Jussieu gen.* 163. *Div. I.* Antheræ distinctæ.

GESNEREÆ. *Richard apud Kunth nov. gen. et spec.* 2. 345.

GESNERIA. Suprà fol. 329.

G. *bulbosa*, tota pubescens; foliis oppositis, ovato-ellipticis, basi cordatis, serrato-crenatis; paniculâ numerosâ, subopposità, patente, distante; pedunculis corymbosis brevioribus pedicellis; limbi inæqualissimi labio summo porrecto oblongo maximo, imo brevissimo revoluto.

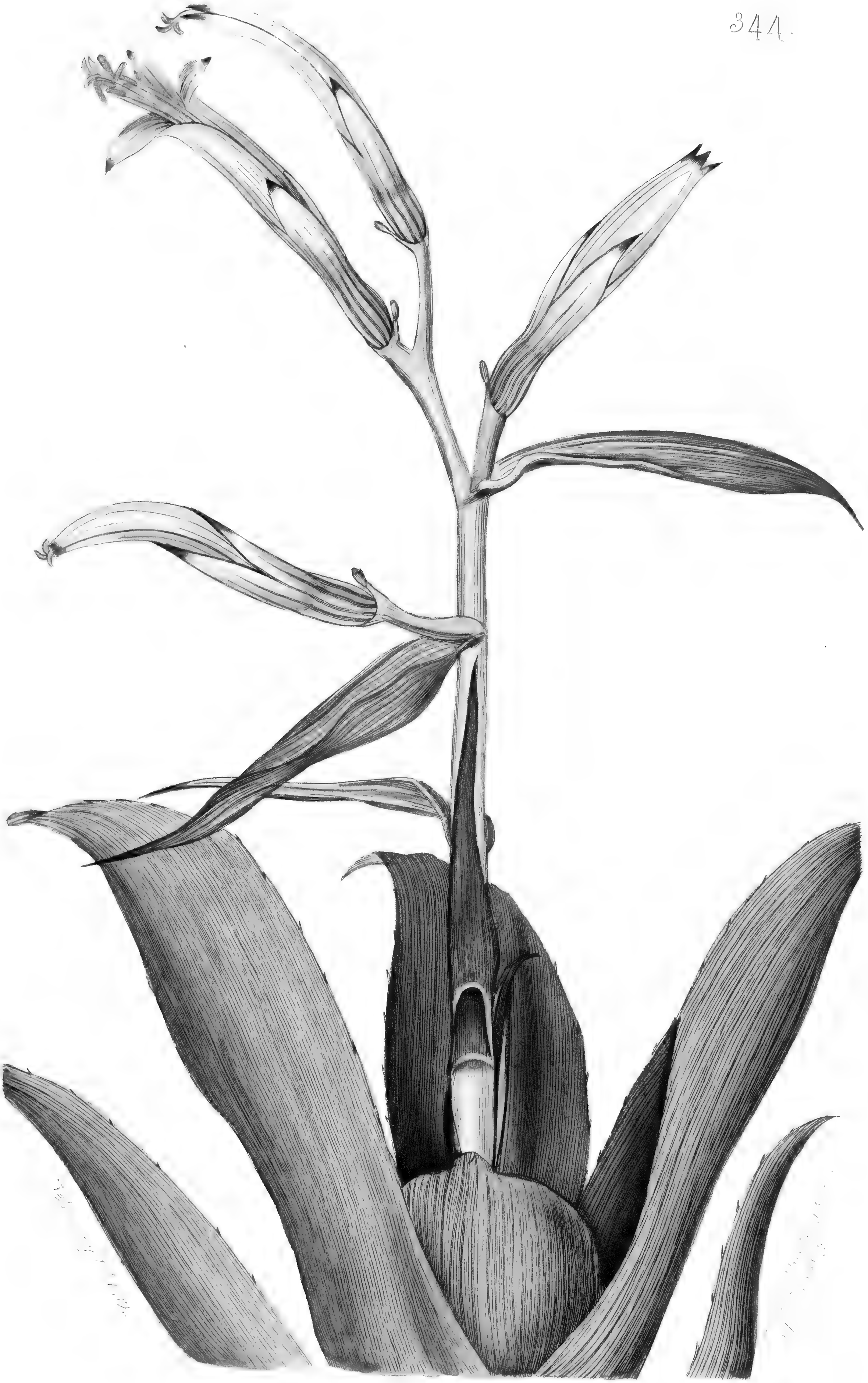
Herbacea, rhizomate *perenni bulbi ad instar rotundato, tunicâ fuscâ membranaceâ.* Caulis *simplex? erectus, subflexuosus, teres, bipedalis, distantèr foliosus.* Folia *carnosula, subtùs densiùs tomentosa, decrescentia, majora subquncialia latitudine triunciali;* petiolus *crassus, brevis.* Pedunculi *corymboso-multiflori foliolis diminutis sensìm supernè bracteaceis subtensi*, pedicelli *uniflori* bracteolâ *subulatâ herbaceâ solitariâ ad basin.* Foliola calycis *brevia, subulata, herbacea, subbreviora fundo externo subrotundo pubescente germinis, cujus marginem parietalem continuant.* Corolla *coccinea, pubescens, clavato-tubulosa, diametro ferè pennæ olorinæ, basi circumcircà protuberans;* labiis limbi *inæqualissimis*, summo *elliptico-oblongo concolori lateribus deflexis*, imo *obliquato intùs maculâ atropurpureâ albo-marginatâ picto.* Fil. *pubescentia, rubentia:* anth. *cruciato-connexæ.* Stylus *persistens, exsertus, coccineus, pubescens.*

We do not trace this fine plant in any recorded species. It differs from all we are acquainted with, by the round bulblike rootstock and by the great inequality of the limb of the corolla. Not having had an opportunity of inspecting the inflorescence, after the drawing was made, we have described that part of the plant from the figure.

Recently introduced by Mr. Lee, of the Hammersmith Nursery. It was sent him from the Brazils, where it is native, by Mr. Chamberlain, the English Consul at Rio Janeiro; and flowered for the first time with us in September. It requires to be kept in the bark-bed of the hothouse; where it proves a most valuable ornament by the beauty, abundance, and long succession of the bloom.

Herbaceous, perennial, furred. *Rootstock* fleshy, resembling a round bulb, covered with a brown membranous coat. *Stem* simple? slightly flexuous, round, about two feet high, distantly leaved. *Leaves* opposite, rather fleshy,

ovately elliptical, serrately crenate, decrescent, cordate at the base, more thickly tomentose underneath, larger ones about five inches in length, and about three in breadth: *petiole* thick, short. *Panicle* terminal, numerous, nearly opposite, spreading, distant: *peduncles* corymbosely many-flowered, shorter than the pedicles, subtended by small leaves gradually diminished into mere bractes at the upper peduncles: *pedicles* one-flowered, with a small subulate herbaceous bracte at their base. *Leaflets* of the *calyx* short, subulate, herbaceous, scarcely so long as the roundish furred inferior portion of the germen, of the outer covering of which they are a continuation. *Corolla* scarlet, pubescent, clavately tubular, nearly of the diameter of the stem of a swan-quill, shallowly protuberant at the base; *lips of the limb* very unequal, *upper one* very large, outstretched, one-coloured, sides deflectent; *lower one* slanted, very short, revolute, marked with a purple stain having a white border on the inside. *Filaments* furred, red. *Anthers* cruciately conjoined. *Style* scarlet, persistent, slightly protruded, furred.



BROMELIA pallida.

Pale-flowered Bromelia.

HEXANDRIA *MONOGYNIA.*

Nat. ord. BROMELIÆ. *Jussieu gen.* 49. *Div. II.* Germen inferum.
BROMELIA. Suprà vol. 3. *fol.* 203.

B. *pallida*, paniculâ laxissimâ, patentissimâ, pauciflorâ, pedunculis 2- *(in nostrâ plantâ abortû* 1-) floris; spathis supremis fertilibus, florem æquantibus, divaricatis.

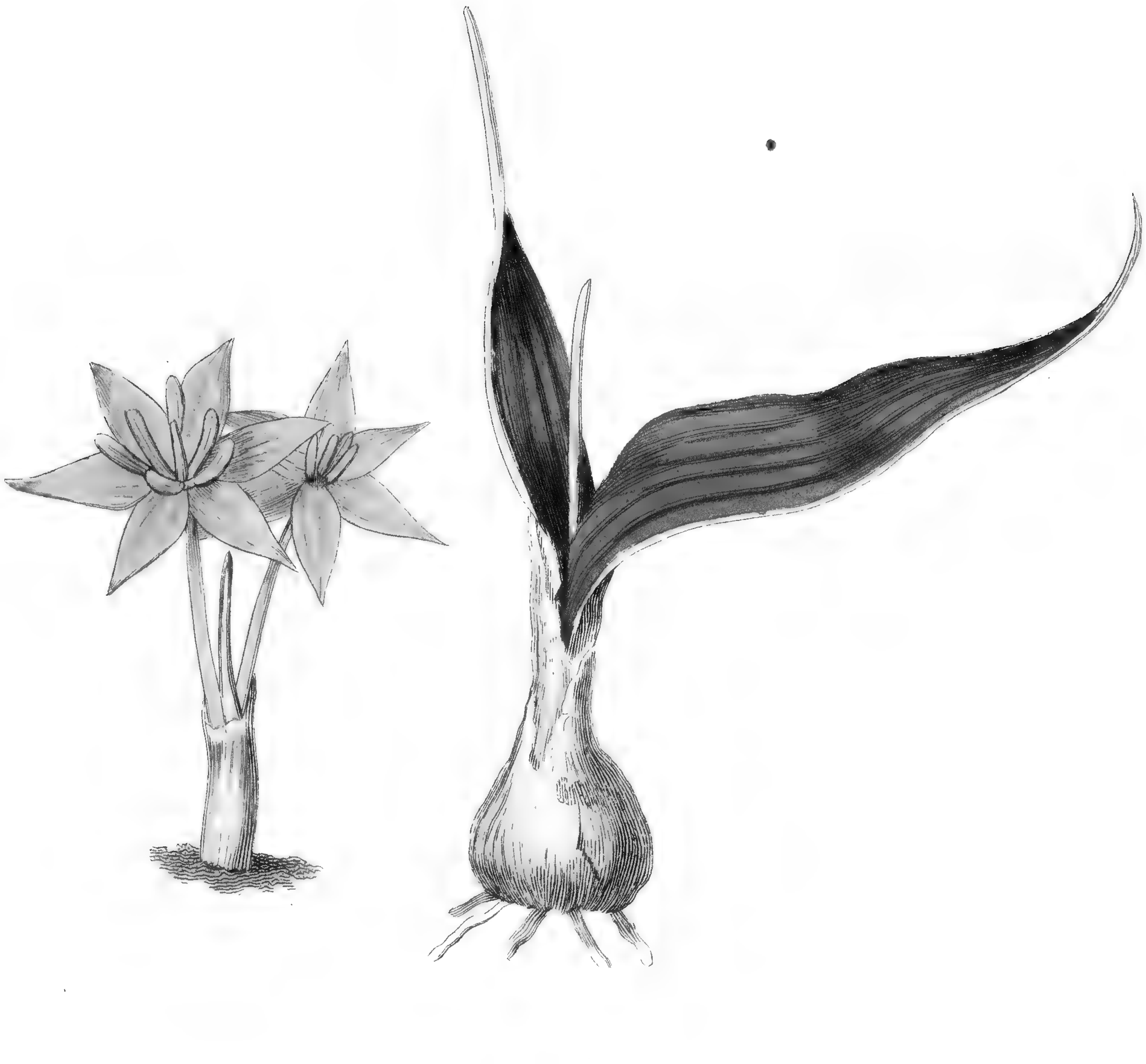
Fol. *multifariàm ambientia, erecto-divergentia, coriaceo-firma, lanceolato-lorata acumine brevi, remotiùs spinuloso-ciliata, convoluto-concava, longiora spithamæa v. ultrà.* Caulis *erectus, dodrantalis v. ultrà, teres simplex, spathaceo-vaginatus:* spathæ *singulares, sparsæ, sphacelato-membranosæ, involuto-lanceolatæ, acuminatæ,* inferiores *fuscescentes, imbricato-erectæ,* superiores *longiores, divaricatæ, vividè punicantes.* Ramuli *v.* pedunculi *subangulosi, distantes, sparsi, crassi, patentes, margine anteriori in* bracteas 2 *obsoletè producti,* inferiores *in spathis axillares,* superiores *nudi, 3-plo breviores flore v. ultrà.* Flores *tubulosi subbiunciales, diametro circitèr pennæ scriptoriæ vulgaris, chloroleuci apicibus livido-cærulescentibus, summitate ramulorum geminis collateralibus, supremo v. exteriore in nostro exemplari constantèr abortiente.* Cal. *duplo brevior corollâ, firmior, nervosa, segmentis lanceolato-acuminatis corollæ arctè applicitis.* Cor. *subsesquiuncialis, ore brevi subbilabiato-patens, laciniis ligulatis convoluto-imbricatis, acumine obtusiusculo brevi.* Anth. *luteæ, lineares, versatiles.* Germ. *cylindraceum, oblongum, viride, sulcato-striatum, triplo brevius corollâ.* Stylus *subexsertus, viridis:* stigmata *saturatiùs viridia, dimidiato-lanceolata, linearia, in unum contorta, vel tandèm soluta.* Sertum squamosum *ad basin interiorem floris omninò ut in* BROMELIÂ nudicauli, *cujus descriptio videnda in vol.* 3. *fol.* 203.

As far as we have been enabled to ascertain, our plant is of an unpublished species. It differs widely from any we are acquainted with in the disposition of the inflorescence and colour of the corolla, the dulness of which forms a singular contrast with the brilliancy of the upper spathes of the stem. We have not learned its native country.

The drawing was taken at Mr. Malcolm's nursery at Kensington; where it was cultivated in the tan-pit of the hothouse, and flowered about the latter end of November. It had been obtained from a garden at Liverpool. We suspect it to be a South American plant.

Leaves multifariously ambient, from upright divergent, of a leathery firmness, lanceolately lorate shortly tapered at

the point, prickly ciliate, prickles very small, rather wide-set, longer ones 7 or 8 inches long or more. *Stem* upright, 9 or 10 inches high or more, round, simple, spathaceously sheathed: *sheaths* single, scattered, sphacelately membranous, involutely lanceolate, acuminate or long pointed, *lower ones* brownish, imbricately upright; *upper ones* the longest, divaricate, brightly crimsoned. *Branchlets* or *peduncles* slightly angular, wideset, scattered, thick, spreading, with the front edge slightly elongated into two shallow broad *bractes* scarcely observable but when carefully looked for, *lower ones* in the axils of the upper spathes, *upper ones* naked, all three times shorter than the flower or more. *Flowers* tubular, about two inches long, of the diameter nearly of a common pen, very pale pea-green, blueish at the tips, placed in pairs side by side at the ends of the branchlets, the uppermost or outer one in our sample always proving abortive, as shown in the present figure. *Calyx* twice shorter than the corolla, more substantial, nerved; *segments* lanceolately long-pointed sitting close about the corolla. *Corolla* nearly an inch and an half long, the orifice shortly and subbilabiately spreading; segments ligulate, convolute, overlapping each other at the sides, shortly pointed. *Anthers* yellow, linear, vibrating. *Germen* cylindrical, oblong, green, furrowed, 3 times shorter than the corolla. *Style* slightly protruded, green: *stigmas* dark deep green, halved lanceolate, linear, twisted into one or else loose. The small scaly crown at the bottom of the interior of the flower resembles exactly that of BROMELIA *nudicaulis*, the description of which may be seen in vol. 3, fol. 203, of the present publication.



Syd. Edwards. del. Pub. by. J. Ridgway & Sons. 170 Piccadilly. Feb. 1. 1819. Smith. Sc.

CURCULIGO plicata. β.

Smooth plaited-leaved Curculigo.

HEXANDRIA *MONOGYNIA.*

Nat. ord. ASPHODELEÆ. *Brown prod.* 1. 274. *Div.* Genera inter Asphodeleas et Amaryllideas media. *l. c.* 288.

CURCULIGO. Cor. supera. *Tubus* stylo accretus, persistens. *Limbus* 6-partitus, planus, deciduus. *Germ.* 3-loculare, loculis polyspermis. *Stigmata* 3, angulis styli adnata (v. rarò distincta.) *Bacca* oblonga, tubo corollæ coronata. *Semina* pulpâ carnosâ (strophiolis?) distincta, umbilicolaterali rostelliformi.

HYPOXIDI, *nec* GETHYLLIDI, *proximum genus. Processus lateralis* Gærtneri *est umbilicus verus; sinus inter quem et seminis extremitatem superiorem, ubi radicula papillâ indicata existit, repletus est carne albo, ab axi pericarpii ortum ducente et pro strophiolâ umbilicali habendo. Hæc structura in* CURCULIGINE ensifoliâ *et* brevifoliâ *observata; reliquas species Indiæ Orientalis nondum examini subjeci. In* CURCULIGINE plicatâ *umbilicus quoque lateralis esse videtur: sed superiore extremitate magìs approximatus, et adpressus nec rostrum efficiens.* Brown loc. cit. 289.

C. *plicata*, foliis lineari-subulatis, floribus sessilibus. *Dryander in Hort. Kew. ed.* 2. 2. 253.
Curculigo plicata. *Nobis in lineâ penultimâ obs. ad char. gen.* GETHYLLIDIS. *in Curtis's magaz. fol.* 1088.
Gethyllis plicata. *Jacq. hort. schœnb.* 1. 4. 2. *t.* 80. *Willd. sp. pl.* 2. 105.
Hypoxis plicata. *Lin. suppl.* 197. *Thunb. prod.* 60.
Fabricia plicata. *Thunb. in Fabricii it. norveg.* 29.
(α) foliis subpubescentibus ciliatis.
(β) foliis nudis margine glabro.

Bulbus *depressus, avellanâ major, albidus, tunicâ cinereâ reticulatâ vestitus.* Fol. *radicalia, pauca, ab* 1 *ad* 6, *lineari-ensiformia, plicatula, acuta, integerrima, in flore erecta et plus minus* 4-*uncialia, utrinque hirtula, ad basin vaginæ spathaceæ inclusa, (denuò ad* 8 *v.* 10 *uncias elonganda).* Flores *sessiles, pauci, inodori, radicati.* Spathæ *paucæ pallidæ et membranaceæ basin corollæ circumdant.* Corollæ tubus *scapum mentitur, ex quo difficultèr extricatur* stylus. Limbi *suprà flavissimi* laciniæ 3 *alternæ foris cum virore flavent,* 3 *reliquæ subtùs virent.* Fil. *flavent.* Anth. *sunt luteæ.* Stylus *albidus, supernè luteus utì et* stigma. Fructus *è terrâ attolluntur,* COLCHICI *more.* Corollæ tubus *longissimus, filiformis, triangularis, erectiusculus.* Limbi 6-*fidi* laciniæ *lanceolatæ, acuminatæ, planæ, striatulæ, patentissimæ, quarum* 3 *alternæ paulò breviores et angustiores.* Fil. *brevissima, erecta, subulata.* Anth. *obtusæ, magnæ, bisulcatæ, erectæ.* Germ. *lineare,* 3-*angulare, compressum.* Stylus *capillaris, erectus, supra corollæ tubum incrassatus.* Stigma *semitrifidum, laciniis erectiusculis linearibus acutis.* Jacq. loc. cit.

The species which at present compose the genus are found in the East Indies, New Holland, and at the Cape of Good Hope; those of the latter region were first incorporated with those of the former by Mr. Dryander in the last edition

of the Hortus Kewensis, upon a suggestion of our own in an observation subjoined to the generic character of GETHYLLIS, at the place we have cited above. All have a resemblance in habit to COLCHICUM, by the germen from radical and subterraneous, becoming a stalked fruit above ground; and by the foliage from short during inflorescence, becoming greatly longer and acquiring its complete size while the fruit ripens.

The present species is native of the Cape of Good Hope; and was introduced by Mr. Masson in 1788. It varies with a smooth foliage, and with one that is slightly furred and ciliate. Specimens of both are preserved in the Banksian Herbarium. The drawing was taken at the nursery of Messrs. Whitley, Brames, and Milne, at Fulham, where it is kept along with other Cape bulbs in a garden-pit or frame.

Bulb depressed, twice the size of a hazel-nut or more, with a membrano-fibrous, reticulated tunic. *Leaves* radical, from one to three, linearly ensiform, long-tapered towards the point, slightly plaited or striate, during the flowering of the plant upright and about two or three inches high, but growing to the length of eight or ten inches during the fruiting of the same, enclosed at the lower part by a root-sheath. *Flowers* sessile, few, scentless, standing upon the root. *Spathes* few, pale, membranous, surrounding the base of the corolla. *Tube* of the *corolla* looking like a peduncle or stalk to the flower, very long, filiform, triangular, straight: *limb* deep yellow, sixparted, flatly stellate; *segments* lanceolate, long-pointed or acuminate, streakletted, 3 alternate ones partly green at the back, 3 entirely so. *Filaments* deep yellow, very short, upright, subulate. *Anthers* pale yellow, large, obtuse, upright. *Germen* linear, triangular, compressed. *Style* grown to the inside of the tube, yellow, very short beyond the tube. *Stigma* yellow, semitrifid, lobes nearly upright, linear, pointed.

CITRUS Aurantium; γ. *myrtifolia*.
Myrtle-leaved Orange-tree.

POLYADELPHIA *POLYANDRIA.*

Nat. ord. AURANTIA. *Jussieu gen.* 259. *Div. II.* Fructus polyspermus baccatus. Folia punctata. Aurantia vera.
CITRUS. Suprà vol. 3. *fol.* 211.

C. *Aurantium*, petiolis alatis, foliis acuminatis, caule arboreo. *Thunb. jap.* 293.
Citrus Aurantium. *Lin. sp. pl. ed.* 2. 2. 1100. *Willd. sp. pl.* 3. 1427. *Hort. Kew.* 3. 101. *ed.* 2. 4. 420.
(α) Malus Aurantia major. *Banh. pin.* 436.
(β) Malus Aurantia, cortice dulci eduli. *Banh. pin.* 436.
(γ) Citrus vulgaris myrtifolia fructû pumilo, medullâ acri et amarâ. *Risso in ann. du muséum.* 20. 169.
Citrus aurantium indicum caule et fructû pumilo, myrtifolium. *Gales. citr.* n°. 22. 134.
Citrus sinensis. (Frutex parvus foliis myrti.) *Persoon syn.* 2. 74; *(vix tamen synonymorum præter forsàn Milleri).*
Aurantium myrteis foliis Sinense. *Ferr. hesp.* 430. *t.* 433.

In the Synopsis Plantarum of Persoon, we find our plant separated from *Aurantium* as a species; but without the statement of any distinction which was not known to every botanist, or the pretence of experience. We believe the alteration to be purely empirical. The plant has been known in most of the European collections for at least a century. It was familiar to the learned and sagacious editors of the Hortus Kewensis, as well as to Mr. Aiton, the late intelligent superintendent of the establishment which gave rise to that classic work, but has never before been recorded as distinct from *Aurantium*; and until we have proof of its being so, it seems safer to let it remain the variety it has been usually deemed.

In two very recent treatises on the genus, cited in the above synonymy, our plant is always spoken of as an undoubted variety of the Common Orange. In one of them it is described as a subvariety of the variety known by the name of the Dwarf Orange, differing from that in having the leaves more pointed. It is chiefly cultivated for ornament or curiosity. The CITRUS *japonica* or Japan Orange-shrub, is described with leaves and fruit no bigger than that

of a cherry; but the latter is said to be of a grateful taste and sweet in that, while in this it is sour and bitter.

The finest plants we have seen of the Myrtle-leaved Orange-Tree, are in the gardens of Sir Joseph Banks at Spring-Grove; from a branch of one of which the present drawing was made. The heads of the trees are round, full of regularly disposed branches loaded every year with bloom and fruit. The method pursued by Sir Joseph in obtaining such, has been by ingrafting a full-grown strong stock of the Common Orange, with at least six scions of this variety, instead of a small stock with only one or two, as is the usual practice.

The species is native of India; and was introduced by Sir Francis Carew before 1595.

The present variety requires like the others to be kept in a greenhouse during the winter months.

SALVIA amarissima.

Bitter Mexican Sage.

DIANDRIA *MONOGYNIA.*

Nat. ord. LABIATÆ. *Jussieu gen.* 110. *Brown prod.* 499. *Sect. I.* **Stamina 2 fertilia; v. dum 4 fertilia, antheræ omnium dimidiatæ.**

SALVIA. Cal. subcampanulatus, bilabiatus, labio superiore 3-dentato, inferiore bifido. *Cor.* ringens. *Filamenta* 2 fertilia bifida, lobo altero adscendenti antherâ dimidiatâ, altero sterili. *Folia rugosa. Flores verticillato-racemosi.* Brown loc. cit. 500.

S. *amarissima*, foliis cordatis crenatis, petiolis bicallosis, caule calycibusque hirto-viscosis, bracteis ovatis ciliatis. *Vahl enum.* 1. 242.

Salvia amarissima. *Orteg. dec.* 4. *Donn cant. ed.* 8. 10. *Willd. enum.* 1. 40. *Aiton's Epit. in add.* 373. *Sweet hort. lond.* 7; *(excluso syn. Hort. Kew.)*

Salvia amara. *Jacq. hort. schœnb.* 3. 2. *t.* 355.

Salvia circinata. *Cavan. ic.* 4. 9. *t.* 318. *Lag. elench.* 13.

Ex semine nata primo jam autumno caulis ad 2pedalem altitudinem strictè attollitur, et floret. Subsequis anni caules ex eâdem radice exeunt plures suffruticosi, digitum crassi, humanæ altitudinis, ramosi, obtusè 4-goni et 4-sulcati, scabri, hispidi. Fol. *opposita, cordata, acuta, crenata, rugosa, viscosa, villosa, mollia, graveolentia, valdè amara, 3-4-uncialia, cum* petiolo *hispido dimidio breviore. Petiolo subjacent* glandulæ *gemellæ subrotundæ pallidè virentes.* Pedunculi communes *4-goni, erecti, elongati, terminales inter summa 2 folia, dein veluti in dichotomiâ positi dum ex dictorum foliorum axillis novi ramuli emittuntur, ipsi seriùs florigeri.* Flores *verticillati, brevitèr pedicellati.* Bracteæ *(deciduæ), ad verticillos oppositæ (semiunguiculares), lanceolatæ, cuspidatæ, striatæ, subserrulatæ, ciliatæ, patentissimæ, reflexæ, purpurascentes.* Cal. *campanulatus, compressus, ferè* 10-*striatus, hirtus, bilabiatus;* labio superiore *subrotundo, acutulo, amplo;* inferiore 2-*partito segmentis semiovatis et acutis, utroque labio erecto et æquilongo.* Corollæ *foris villosæ* tubus *albus;* faux *alba et calyce duplo longior;* limbus *saturatè cæruleus, ringens:* galea *ovata, oblonga, emarginata, connivens:* labium 3-*lobum, patentissimum, galeâ longius,* laciniâ *mediâ subrotundâ, emarginatâ, maximâ, lateralibus oblongis, obtusis, parvis, mediæ approximatis.* Genitalia *galeâ inclusa. Planta primi anni stricto habitu suo foliisque majoribus multùm differt ab adultiore.* Jacq. loc. cit.

SALVIA is one of the genera suffered to remain unbroken, and forms an extensive group, represented in all the quarters of the globe. Vahl has recorded 137 species in his Enumeratio Plantarum. The great majority are herbaceous; though some are shrubby. Mr. Nuttall reckons about 47 published species natives of America. We have only two that belong to these islands.

The present is native of Mexico; and though it does not appear in either edition of the Hortus Kewensis, we find by Sweet's Hortus Suburbanus Londinensis that it has been introduced ever since 1803. The drawing was taken from a yearling plant at the nursery of Messrs. Whitley, Brames, and Milne, at Fulham, where it was cultivated in the open ground. The flowers are said to be larger on old plants and the foliage smaller. The seeds which produced the specimen we saw, had been received from Madrid by the above nurserymen.

Perennial. *Stem* 2-6 feet high, suffruticose, branching, bluntly 4-cornered, 4-furrowed, hispid. *Leaves* opposite, cordate, acute, crenate, wrinkled, viscous, villous, soft, rank smelling, very bitter, 2-4 inches long, with a hispid *petiole* about half their length, close below the base of which are two small parallel round *glands* of a pale green colour. *Spikes* terminal, upright, long. *Flowers* verticillate (in whorls), shortly pedicled. *Bractes* deciduous, opposite, under the whorls, lanceolate, cuspidate, striate, subserrulate, ciliate, very widely spread, reflectent, purplish. *Calyx* campanulate, compressed, generally ten-streaked, roughly furred, bilabiate, with the lips of equal length and upright; *upper one* roundish, rather pointed, large; *lower* twoparted with semiovate pointed segments. *Corolla* villous on the outside; *tube* white; *faux* white and twice longer than the calyx; *limb* deep blue, ringent: *casque* ovate, oblong, emarginate (notched), connivent: *lip* 3-lobed, outspread, longer than the casque, *middle segment* nearly round, emarginate, much the largest, *lateral ones* obtuse, small, placed near to the middle one. *Stamens* and *Pistil* enclosed in the casque.

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SPERMADICTYON suaveolens.

Sweet-scented Spermadictyon.

PENTANDRIA *MONOGYNIA.*

Nat. ord. RUBIACEÆ. *Jussieu gen.* 196.

SPERMADICTYON. *Caps.* infera, unilocularis, quinquevalvis. *Sem.* quinque, *arillo* reticulato. *Cor.* infundibuliformis. *Stigma* 5-fidum. *Roxburgh corom. vol.* 3. 32. *(ex anglico vers.).*

S. *suaveolens*, fruticosum: foliis oppositis, ellipticis: floribus terminalibus umbellato-capitatis. *Id. loc. cit. tab.* 296; *(ex angl. vers.).*

Frutex *erectus:* rami *oppositi, brachiati, ascendentes,* cortice *(ubi lignei) cinereâ punctis fusco-purpurascentibus conspersâ.* Fol. *elliptico-lanceolata, glabra, integra, à tribus ad sex uncias longa:* petioli *breves.* Stipulæ *v. potiùs membranæ connectiles, latæ, ensiformes (subulatæ).* Flores *sessiles, ramulorum brevium tricholomorum terminales, corymboso-capitati, numerosi, candidi, odorem spirantes jucundissimum.* Bracteæ *ensiformes (subulatæ), villosæ, plures fasciculum quemque v. capitulum involucrantes, cæteræ flores singulos distinguentes.* Cal. *superus, quinquefidus, persistens, segmentis subulatis.* Cor. *monopetala, infundibuliformis:* tubo *gracili pauxillum orificium versùs dilatescente:* limbo *quinquepartito, patente;* laciniis *oblongis.* Fil^a. *brevissima, tubo paululùm infra orificium inserta:* antheræ *semierectæ, lineares.* Germ. *inferum, ovale:* stylus *longitudine tubi corollæ:* stigma *quinquefidum.* Caps. *oblonga, ab apice dehiscens.* Semina 5, *singulum pro valvâ singulâ capsulæ, nigra, compressa, arillo arido reticulato tecta.* Roxburgh loc. cit. (ex anglico).

A species first observed by Dr. Roxburgh, and made the foundation of a genus, to which he had given the name of HAMILTONIA; but that name being found to be preoccupied by a different group, has been changed for the present by Mr. Brown. The essential generic mark seems to be the netted arillus, which envelops each seed, and has suggested the generic appellation of SPERMADICTYON.

A delightfully fragrant shrub; found by Mr. William Roxburgh in India on the Rajamahl Hills, and introduced into the Botanic Garden at Calcutta, where it blooms during the cold season of that country. It has been very recently received in England; and has not we believe attained any considerable size. The drawing was taken in November last from a sample which flowered in the tan-pit of the bot-house of Messrs. Whitley, Brames, and Milne, nurserymen at Fulham.

It is described in "the Coromandel Plants" as follows: "*Stem* erect, shrubby. *Branches* opposite, cross-armed, "ascending. *Bark* of the ligneous parts ash-coloured, with "dark purplish specks. *Leaves* opposite, short-petioled, "from elliptic to lanceolate, smooth, entire; length from "three to six inches. *Stipules* or rather connecting mem-"branes, broad, ensiform. *Flowers* sessile, in terminal "corymbose heads, on short trichotomous branchlets, nu-"merous, pure white. *Bractes* ensiform, villous, several "surrounding each fascicle or head of flowers, as well as "intermixed among them. *Calyx* above, 5-cleft, perma-"nent; *divisions* subulate. *Corolla* 1-petalled, funnel-"shaped. *Tube* slender, widening a little towards the mouth. "*Border* of five spreading oblong divisions. *Filaments* 5, "very short, inserted into the tube of the corolla a little "within its mouth. *Anthers* half-erect, linear. *Germen* "beneath, oval. *Style* as long as the tube of the corolla; "*stigma* 5-cleft. *Capsule* oblong, hairy, one-celled, five-"valved, opening from the apex: *seeds* 5, one for each valve "of the capsule, black, compressed, enclosed in a dry "latticed aril."

Pub.d by S. Ridgway & Sons 170 Piccadilly Feb.y 1.st 1819

Smith. del

CAMELLIA axillaris.

Pulo-Pinang Camellia.

MONADELPHIA *POLYANDRIA.*

Nat. ord. AURANTIA. *Jussieu gen.* 262. *Div. III.* Fructus polyspermus capsularis. Folia non punctata. Genera AURANTIIS et MELIIS affinia.
THEACEÆ. *Mirbel in Nouv. Bulletin.* 3. 382.
CAMELLIA. Suprà vol. 1. *fol.* 12.

C. *axillaris*, arboreus; foliis oblongis, acutis, serrulatis; pedunculis axillaribus, solitariis, unifloris; calyce penta-hexaphyllo sericeo. *Roxburgh MSS. in Mus. Banks. conservatis; (ex anglico).*

Caulis *teres, supernè ramosus, ramis junioribus virentibus.* Fol. *sparsa, patentissima, coriaceo-incrassata, oblonga, cuneato-lanceolata, integra vel supernè acutè serrata, glaberrima, supernè versùs brevitèr attenuata, infernè versùs in* petiolum *brevissimum crassum prolixiùs attenuata, longiora octouncialia v. ultrà, ubì latiora diametro 2 unciarum cum dimidio alteriùs vel magìs;* novellissima *uti et* squamæ gemmarum *subtùs subtilissimè sericea.* Cal. *hexaphyllus, crassiusculus, subcartilagineus, ⅔ partes unciæ transversus, campanulato-rotatus, extùs sericeus,* squamis *pluribus caducis cinctus;* foliolis *æqualibus, subrotundis, convexis, supernè scarioso-fuscis, summo margine fisso-emarginatis.* Cor. *alba, aliquâ suffusa flavedine, imbricato-rotata, subæqualis diametro subbiunciali, hexapetala,* petalis *lato-obcordatis, emarginatis, supernè recurvis, basi brevitèr angustatis;* 3 exterioribus *firmioribus, submajoribus, vix undulatis,* 3 interioribus *tenerioribus, undulatis.* Pedunculi *crassi, sericei, brevissimi, pluriès breviores calyce, lapsarum squamarum vestigiis cicatrizati.* Anth. *in nostro specimine polline ferè destitutæ.* Germen *non inspeximus.* Stylus *erectus, strictus, columnaris, subexsuperans stamina;* stigmata 3, *virentia, subbifida? patentia.*

An unpublished species, lately received from the Botanic Garden at Calcutta, where it was introduced by Dr. Roxburgh from Pulo-Pinang, or, as it is more commonly called amongst us, Prince of Wales's Island. It makes the third species by which this popular genus is known in our collections. All three are natives of the Indian regions of Asia.

The drawing was taken from a plant at the nursery of Messrs. Whitley, Brames, and Milne, Fulham, where it was cultivated in the hothouse and flowered in December for the first time.

According to Dr. Roxburgh an arborescent shrub; in the plant we saw not exceeding three feet. *Stem* round,

branching towards the upper part, young branches green. *Leaves* scattered, widespread, coriaceously thickened, oblong, cuneately lanceolate, some entire, most sharply serrate at the upper half of the blade, tapered far downwards into short thick petioles, largest sometimes exceeding 8 inches in length and two and a half in breadth; the very young ones as well as the scales of the bud are finely and silkily furred at the under side. *Calyx* of six leaflets, thickish, subcartilaginous, campanulately rotate, about $\frac{2}{3}$ of an inch in diameter, silkily furred on the outside, surrounded by several caducous *scales*; *leaflets* nearly equal, suborbicular, convex, brown and scariose at the upper part, emarginately split at the upper part of the border. *Corolla* white, suffused with yellow, imbricately rotate, nearly equal, two inches in diameter, hexapetalous; *petals* broadly obcordate, emarginate, recurved at the upper part, very shortly tapered at the base; *three outer ones* rather the largest, more substantial, scarcely undulate; 3 *inner ones* tenderer, undulated. *Peduncles* thick, silky, several times shorter than the calyx, scarred from the falling of the scales. *Anthers* in our specimen with scarcely any pollen, and that imperfect. We did not inspect the *germen*. *Style* upright, columnar, overtopping the stamens; *stigmas* 3, green, spreading, subbifid.

The incompleteness of the stamens and the apparent completeness of the pistil in our sample, suggested to Mr. Brown the possibility of the species being androgynous. This however he mentioned as matter of mere surmise, it being very probable that the incomplete development of the stamens might arise from the flower being produced out of its natural climate.

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	Volumen.	*Folium.*
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Epidendrum nutans.	v. 1.	17.
Epidendrum umbellatum.	v. 1.	80.
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Erica filamentosa.	v. 1.	6.
Erica tumida.	v. 1.	65.
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Hibiscus phœniceus.	v. 3.	230.
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	Volumen.	*Folium.*
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Indigofera filifolia.	*In notis appendicis voluminis* 3.	
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Inula glandulosa.	v. 4.	334.
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Ipomœa cærulea.	v. 4.	276.
Ipomœa chryseides.	v. 4.	270.
Ipomœa denticulata.	v. 4.	317.
Ipomœa hederacea.	v. 1.	85.
Ipomœa Jalapa. α.	v. 4.	342.
Ipomœa insignis.	v. 1.	75.
Ipomœa maritima.	v. 4.	319.
Ipomœa muricata.	*In notis appendicis hujus voluminis.*	
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Ipomœa obscura.	v. 3.	239.
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Ipomœa sanguinea.	v. 1.	9.
Ipomœa setosa.	v. 4.	335.
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Jasminum Sambac.	v. 1.	1.
Jasminum revolutum.	v. 3.	178.
Justicia eustachiana.	v. 4.	309.
Kæmpferia pandurata.	v. 2.	173.
Kœlreuteria paniculata.	v. 4.	330.
Lachenalia pallida. α.	v. 4.	314.
Lachenalia pallida. β.	v. 4.	287.
Lebeckia contaminata,	v. 2. 104; *et in notis appendicis voluminis* 3.	
Leonotis neptifolia.	v. 4.	281.
Liatris elegans.	v. 4.	267.
Lilium pumilum.	v. 2.	132.
Limodorum falcatum.	v. 4.	283.
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Lobelia fulgens.	v. 2.	165.
Lobelia splendens.	v. 1.	60.
Lonicera dioica. β.	v. 2.	138.
Lonicera japonica.	v. 1.	70.
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Magnolia cordata.	v. 4.	325.
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Malpighia urens.	v. 2.	96.
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Malva fragrans.	v. 4.	296.
Marica gladiata.	v. 3.	229.
Melaleuca fulgens.	v. 2.	103.
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Mimosa sensitiva.	v. 1.	25.

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Monarda punctata.	v. 1.	87.
Moræa lurida.	v. 4.	312.
Narcissus montanus.	v. 2.	123.
Nerium odorum. β.	v. 1.	74.
Œnothera odorata.	v. 2.	147.
Ophrys tenthredinifera.	v. 3.	205.
Orchis longicornu.	v. 3.	202.
Ornithogalum niveum.	v. 3.	235.
Ornithogalum prasinum.	v. 2.	158.
Ornithogalum revolutum.	v. 4.	315.
Ornithogalum thyrsoides. α.	v. 4.	316.
Ornithogalum thyrsoides. β.	v. 4.	305.
Othonna abrotanifolia.	v. 2.	108.
Othonna cheirifolia.	v. 4.	266.
Oxalis flava.	v. 2.	117.
Pachysandra procumbens.	v. 1.	33.
Pæonia albiflora. β.	v. 1.	42.
Pancratium angustum.	v. 3.	278.
Pancratium calathinum.	v. 3.	215.
Pancratium canariense.	v. 2.	174.
Pancratium guianense.	v. 4.	265.
Pancratium maritimum.	v. 2.	161.
Pancratium ovatum.	v. 1.	43.
Papaver floribundum.	v. 2.	134.
Passiflora adiantifolia.	v. 3.	233.
Passiflora angustifolia.	v. 3.	188.
Passiflora fœtida.	v. 4.	321.
Passiflora glauca.	v. 1.	88.
Passiflora holosericea.	v. 1.	59.
Passiflora incarnata. α.	v. 4.	332.
Passiflora incarnata. β.	v. 2.	152.
Passiflora laurifolia.	v. 1.	13.
Passiflora lutea.	v. 1.	79.
Passiflora maliformis.	v. 2.	94.
Passiflora minima.	v. 2.	144.
Passiflora perfoliata.	v. 1.	78.
Passiflora quadrangularis.	v. 1.	14.
Passiflora racemosa.	v. 4.	285.
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Patersonia glabrata.	v. 1.	51.
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Pavonia spinifex.	v. 4.	339.
Penæa squamosa.	v. 2.	106.
Phaseolus Caracalla.	v. 4.	341.
Phlox suffruticosa.	v. 1.	68.
Pinguicula lutea.	v. 2.	126.
Pittosporum revolutum.	v. 3.	186.
Pittosporum undulatum.	v. 1.	16.
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Pyrethrum fœniculaceum.	v. 4.	272.
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Rosa provincialis. β. *(muscosa flore simplici.)*	v. 1.	58.
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Sempervivum glutinosum.	v. 4.	278.
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Silene pensylvanica.	v. 3.	247.
Solanum amazonium.	v. 1.	71.
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Solanum fontanesianum.	v. 2.	177.
Sparaxis grandiflora.	v. 3.	258.
Spermadictyon suaveolens.	v. 4.	346.
Stenanthera pinifolia.	v. 3.	218.
Sterculia Balanghas.	v. 3.	185.
Steria Eupatoria.	v. 2.	98.
Stylidium graminifolium.	v. 1.	90.
Styphelia longifolia.	v. 1.	24.
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Teedia pubescens.	v. 3.	214.
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Tritonia refracta.	v. 2.	135.
Tulipa cornuta.	v. 2.	127.
Tulipa oculus solis.	v. 3.	204.
Uropetalon glaucum.	v. 2.	156.
Vaccinium fuscatum.	v. 4.	302.
Valeriana Cornucopiæ.	v. 2.	155.
Velia Pseudo-Cytisus.	v. 4.	293.
Verbena Aubletia.	v. 4.	294.
Vestia lycioides.	v. 4.	299.
Vinca herbacea.	v. 4.	301.
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Webera corymbosa.	v. 2.	119.
Witsenia maura.	v. 1.	5.

NOTES.

IPOMŒA *tuberculata*. *Vol.* 1. *fol.* 86.

This species was published at Vienna in the Eclogæ Plantarum of Baron F. J. Jacquin nearly about the same time when it appeared in the above cited article of this work. The fasciculus, however, in which it is contained has only lately reached us; and as we cannot ascertain precisely which name should be retained in right of priority, we merely offer the following quotation as a synonym;

IPOMŒA *dasycarpa*. *Jacq. ecl.* 1. 132. *t.* 89.

The species is spoken of by the Baron, who received the seed from England, as a native of China. Dr. Roxburgh, by whom it was introduced, speaks of it generally as native of India.

BARLERIA *mitis*. *Vol.* 3. *fol.* 191.

This plant has been also published by Baron Fran^{s} Jos. Jacquin, in a fasciculus of his Eclogæ which had not reached us when we gave the article. By the date of the Volume (now complete) in which this fasciculus is included, it is evident that the name there conferred has the priority of the one offered by us by at least some months. We were not aware of the synonymy which we find attributed to it; and which we now subjoin;

BARLERIA flava.

BARLERIA flava. *Jacq. ecl.* 1. 67. *t.* 46. *Dum. Cours. bot. cult. ed.* 2. 2. 566.
Eranthemum flavum. *Willd. enum. suppl.* 2.
Justicia flava. *Vahl symb.* 2. 15. *Willd. sp. pl.* 1. 92. *Vahl enum.* 1. 139.
Dianthera flava. *Vahl symb.* 1. 5.
Dianthera americana. *α. flava. Forsk. descr.* 9.

The flowers in strong plants, form an imbricated decussated upright spike, 3 or 4 inches in length. The leaves are sometimes a foot long, and 4 inches broad. The stamens vary from 2 to 4 and even 5. Jacquin describes the style as twice the length of the corolla. The species is native of Egypt; and was introduced into the gardens at Paris some years ago. Our figure was taken from a newly imported plant; the inflorescence of which seems to have been a very feeble and imperfect sample. No one could ever, we suspect, have divined the plant through the description by Vahl. The synonymy has been most probably made out by access to some Herbarium which we have not here; or else the prior knowledge of the habitat had suggested a search in Forskăl's work on the Egyptian plants.

IPOMŒA *obscura*. *Vol.* 3. *fol.* 239.

The subject of this article, which had been generally deemed an annual plant, proves to be perennial, and evergreen.

IRIS *dichotoma*. *Vol.* 3. *fol.* 246.

We have attributed the appellation of "Scissor-Plant," which this species has acquired in Siberia, to the dichotomy of the stem; but believe that it should be attributed to the shape and appearance of the foliage. This however is an etymology that any one may decide for himself.

NOTES.

IPOMŒA bona nox. *β. purpurascens. Suprà fol.* 290.

When we published this plant as a variety of IPOMŒA *bona nox*, we had been informed, by the gentleman from whom we received the sample, that it was native of the West Indies; and being able to detect no distinction between the two plants, in the state they were known to us, we did not judge it safe to separate them specifically on the score of difference of colour. We now learn that our plant is native of the East Indies, and has been long recorded by the specific title of *muricata*. It was however deemed by Linnæus so nearly connected with *bona nox* (a West-Indian plant), that he thought it necessary to say expressly that it was not that species, though he gives us no mark to distinguish the two. Whether specifically distinct or not, the following synonymy belongs to our plant, and had we been aware of it, we should have given the article as follows;

IPOMŒA muricata.

Rough-stalked Ipomœa.

I. *muricata*, foliis cordatis, pedunculis incrassatis calycibusque lævibus, caule muricato. *Linn. mant.* 44; *(sub* CONVOLVULO).
Ipomœa muricata. *Jacq. hort. schœnb.* 3. 40. *t.* 323.
Convolvulus muricatus. *Lin. loc. cit. Hort. Kew. ed.* 2. 1. 332. *Willd. sp. pl.* 1. 858. *Idem enum.* 1. 204.

Mr. Herbert has observed, on a comparison of *bona nox* and *muricata*, both cultivated in his hothouse at Spofforth, that in the first the foliage is entirely smooth, in the second roughishly pubescent at the upper side; that in the first the stem becomes rather woody towards the bottom, but not so in the second, which rarely survives 5 or 6 months; that in the first the points of the leaflets of the calyx are much longer and more spreading than in the latter; and that in the first the limb of the corolla is flatter and rounder than in the second, where it is rather concave and angular.

MOREÆ SPECIES. *Vid. suprà fol.* 312.

I. *Stigmata vel bipartita laciniis convoluto-filiformibus, vel diminuto-petaliformia ferè ut in* CROCO.

virgata. *Jacq. ic. rar.* 2. *t.* 228.
elegans. *Jacq. hort. schœnb.* 1. *t.* 2.
flexuosa. *Nob. in Curtis's mag. t.* 695.
spicata. *Nob. in loc. cit. t.* 1283.
polyanthos. *Vahl enum.* 2. 157. *Exemplar adest in Herb. Banks.*
collina. *Nob. in Curt. mag. tabb.* 1033, 1103, 1612. juncea. *Lin. sp. pl.* 59.
pavonia. *Nob. in loc. cit. t.* 1247.

II. *Stigmata petaliformia, ampla.*

tripetala. *Nob. in loc. cit. t.* 702.
lurida. *Nob. suprà t.* 312.
tricuspis. *Nob. in Curtis's mag. tabb.* 696, 772. IRIS pavonia. *Curtis in loc. cit. t.* 168.
villosa. *Nob. in loc. cit. tab.* 571; *(sub* IRIDE *at malè).*
tenuis. *Nob. loc. cit. t.* 1047.
unguiculata. *Nob. in loc. cit. t.* 593.
angusta. *Nob. in loc. cit. t.* 1276.
edulis. *Nob. in loc. cit. tabb.* 613, 1238. vegeta. *Jacq. ic. rar.* 2. 224; *non Linnæi.* IRIS longifolia. *Vahl enum.* 2. 149.
setacea. *Nob. in ann. of bot.* 1 219. IRIS. *Thunb. de Iride, t.* 1. *fig.* 1.

longiflora. *Nob. in Curt. mag. t.* 712.
spathacea. *Nob. in ann. of bot.* 1. 219. IRIS. *Vahl enum.* 2. 142.
polystachia. *Nob. in ann. of bot.* 1. 219. IRIS. *Vahl enum.* 2. 150. IRIS lacera. *Lamarck encyc.* 3. 304.
bituminosa. *Nob. in Curt. mag. t.* 1045.
viscaria. *Nob. in Curt. mag. t.* 587; *(sub* IRIDE *at malè).*
plumaria. *Nob. in ann. of bot.* 1. 219. IRIS. *Thunb. de* IRIDE 16. MORÆA eriopetala. *Vahl enum.* 2. 158; *exclusis Millero et Linnæo cum varietatibus* α. β.
ramosa. *Nob. in Curt. mag. t.* 771.
tristis. *Nob. in Curt. mag. t.* 577; *(sub* IRIDE *at malè).* MORÆA vegeta. *Lin. sp. pl.* 59. *Mill. Ic. t.* 138. *fig.* 2. iriopetala. β. *Vahl enum.* 2. 158; *exclusis Thunb. Diss. et Prod. uti et Linn. suppl.*
crispa. *Nob. in loc. cit. tabb.* 759, 1214.
Sisyrinchium. *Nob. in loc. cit. t.* 1407.
ciliata. *Nob. in loc. cit. tabb.* 1012, 1061.
papilionacea. *Nob. in loc. cit. t.* 750.
minuta. *Nob. in ann. of bot.* 1. 219. IRIS. *Vahl enum.* 2. 138.

The MORÆA *iridioides*, *Willd. sp. pl.* 1. 244, (the MORÆA *vegeta* of Miller, but not of Linnæus, and the IRIS *compressa* of Thunberg) should clearly be ranked under IRIS. See our note in *Curtis's magaz.* N°. 1407. *vers. fol.*

We have omitted the American species included in this genus by Mr. Kunth as editor of the "Nova Genera & Species, &c." of Messrs. Humboldt and Bonpland; believing that when examined in the living plant they will be found not to belong to this generic group.

ALPINIA *malaccensis*. *Suprà fol.* 328.

Since the publication of that article, Sir Abraham Hume has obligingly informed Mr. Edwards, that the plant, of which the one that flowered at Mr. Fawkes's seat in Yorkshire was a scion, and has afforded the figure we have published, had been sent to him along with *mutica* (a species of which we believe no figure has been yet published) by Dr. Roxburgh from the Botanical Garden at Calcutta.

IPOMŒA *Jalapa*. α. *Suprà fol.* 342.

Since that article was published, we have seen copies of two new works on North American plants, from which we have extracted the following synonyms as belonging to the subject treated of in that article.

CONVOLVULUS macrorhizus. *Elliot sket.* 1. 252. *Nuttall gen.* 1. 123. *n.* 13.

Mr. Elliot tells us that the plant is native of the islands of (in) Georgia and Carolina; and that it twines itself round shrubs and fences, and flowers from June to October. The root in old plants, weighs from 40 to 50 pounds: the flesh of it is white and insipid.

The following observation is due to Dr. Baldwyn.

"My information respecting the medicinal qualities of the IPOMŒA "*macrorhiza* of Michaux, has been derived from actual experiment. Six "drachms of the pulverized root has been given under my notice, without "producing any cathartic effect. I have also subjected the dried root to "the test of chemical analysis, and found it to contain no resin (in which "the active powers of the officinal Jalap reside), or so small a quantity as "not to prevent its being used as an article of diet. It contains a great "deal of saccharine, along with a considerable quantity of farinaceous "matter. It is probably not more cathartic than the CONVOLVULUS "(IPOMŒA. nob.) *Batatas* (Sweet Potatoe), nor contains more resin. Ne-"groes I have been informed sometimes eat it."

ERRATA.

Fol. 268. pag. 3. l. 20. For " bractes" read " branches".
Fol. 307. l. 6. from bottom. For " and was" read " and is".
Fol. 309. l. 18. For " *ed.* 2. 139". read " *ed.* 2. 1. 39".
Fol. 228. l. 5. from bottom. For " *sericea*" read " *holosericea*".
Fol. 332. l. 2. Pro " δ" lege " *a*".
Fol. 336. l. 11. Pro " 277" lege " 177".
Fol. 336. l. 17. Pro " *Trew ehret. t.* 14" lege " *Trew ehret.* 3. *t.* 14".
Fol. 337. l. 15. Post " *hirtus.*" insere " *Willd. sp. pl.* 3. 813;" et pro " Exclusâ" pone " exclusâ"
Fol. 342. l. 13. Pro " 331" lege " 332".

THE END OF VOL. IV.

S. Gosnell, Printer, Little Queen Street, London.